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ABSTRACT

This document contains two reports that assess the facilities and equipment needs of two American Indian technical institutions, and suggest 5-year plans. United Tribes Technical College in Bismarck (North Dakota) provides 1-year and 2-year vocational-technical programs to about 280 American Indian students. Because most have low incomes and/or dependent children, or never lived off their reservations, the college also provides housing and a variety of support services. Most buildings are nearly 100 years old and require major repairs and renovations. Expansion of enrollment to accommodate students on waiting lists requires construction of additional family housing, dormitories, classrooms, and other facilities. Also needed are computers and training equipment that reflect current practice in occupational areas. The second institution, Crownpoint Institute of Technology (CIT) in the Navajo Nation (New Mexico) provides 1-year technical-vocational programs to about 150 students and continuing education courses to about 200. Located in a rural area, CIT provides virtually all housing for students and faculty. The main building was scheduled for demolition in fall 1992 due to structural problems. Construction needs include replacement structures and additional housing and facilities for expanding enrollment. Several options for meeting each institution's needs were developed in light of tribal economic development plans and state employment projections. Both of these reports include details on institutional mission and objectives, enrollment, student characteristics, funding, expenditures, and estimated construction costs. (SV)

ED357931

ASSESSMENT OF TRAINING AND HOUSING NEEDS WITHIN TRIBALLY CONTROLLED POSTSECONDARY VOCATIONAL INSTITUTIONS

A Description of Facility and Housing Needs

and

Five-Year Projections for Meeting Facility and Housing Needs

U.S. DEPARTMENT OF EDUCATION
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Lorelei Brush
Kerry Traylor
Michael O'Leary

February 1993

Prepared under contract for
the Department of Education by:

PELAVIN ASSOCIATES, INC.
2030 M Street, N.W., Suite 800
Washington, DC 20036

U.S. DEPARTMENT OF EDUCATION • OFFICE OF POLICY AND PLANNING

RC 019192

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A DESCRIPTION OF FACILITY AND HOUSING NEEDS

TABLE OF CONTENTS

Page

EXECUTIVE SUMMARY iii

CHAPTER 1: INTRODUCTION I-1

Research Questions I-3
Academic Program Philosophies and Goals I-3
Conditions and Capacities of Current Institutional Facilities and Equipment I-3
Impact of Student Housing and Service Requirements on Institutional Infrastructure I-4
Five-Year Projections of Institutional Training Facilities and Equipment and Housing Needs I-4

The Data Collection Process I-5
Review of Documents I-5
Site Visits I-5
Organization of the Report I-6

CHAPTER 2: FACILITIES AND EQUIPMENT NEEDS OF UNITED TRIBES TECHNICAL COLLEGE II-1

Introduction II-1

Mission and Objectives II-1

Student Characteristics II-4

Campus Facilities--Conditions, Capacities, and Needs II-11
Student Housing II-17
Instructional Facilities II-21
Faculty and Administrative Offices II-23
Facilities for Student Services II-23
Child Care Services and Elementary School Facilities II-26

Two Approaches to Meeting UTTC's Facility Needs II-27
Construction Approach II-27
Renovation Approach II-30

Campus Training Equipment--Conditions, Capacities, & Needs II-30

Current Financial Picture of UTTC II-35

Conclusion II-44

CHAPTER 3: FACILITY AND EQUIPMENT NEEDS OF CROWNPOINT INSTITUTE OF TECHNOLOGY III-1

Introduction III-1

Overview III-1

Mission and Objectives III-2

Student Characteristics III-5

Campus Facilities--Conditions, Capacities, and Needs III-9
  Student Access III-14
  Instructional and Support Services III-16

Training Equipment--Conditions, Capacities, and Needs III-17

Current Financial Status of CIT III-20

Summary of Facility and Equipment Needs III-27

CHAPTER 4: CONCLUSIONS AND RECOMMENDATIONS IV-1

EXECUTIVE SUMMARY

This report is the first of two prepared for the Department of Education as a part of a task order entitled, "An Assessment of Training and Housing Needs within Tribally Controlled Postsecondary Vocational Institutions." Its goal, as stated in Section 389(a) of the Carl D. Perkins Vocational and Applied Technology Education Act Amendments of 1990 is to "conduct a detailed study of the training and housing needs" of the two institutions eligible for aid under Section 384(a) of the Act. These institutions are the United Tribes Technical College (UTTC) in Bismarck, North Dakota, and the Crownpoint Institute of Technology (CIT) in Crownpoint, New Mexico. Section 389 further states that the study "shall include an examination of -- (A) training equipment needs; and (B) housing needs of families whose heads of household are students and whose dependents have no alternate source of support while such heads of household are students." In this report, we have extended the specific purposes of the Act to include a study of (1) the institutions' training facilities and equipment and student housing, and (2) the institutions' needs for renovation or construction of facilities and repair or purchase of equipment.

United Tribes Technical College

UTTC's mission is to educate American Indian students for self-sustaining employment in vocational-technical occupations with maximum job placement potential in the state, region, and Indian communities from which students are drawn. Because 40 percent of its students have never lived outside of their reservations and 47 percent are parents, the college provides this education in a residential setting that offers a variety of critical support services, such as child care, elementary school, counseling, and medical care.

UTTC offers two-year programs in six areas and one-year certificate programs in 10 areas. Its annual enrollment has increased steadily over the last five years, from 207 in 1987-88 to 284 in 1991-92; the college would like to expand from its current enrollment to 400 students over time to maximize its instructional capacity. Up to 100 prospective students are placed on a waiting list each year, of whom 75 to 85 cannot be admitted. Thus, there are additional individuals desirous of obtaining vocational-technical training and qualified for entry who are not now being served. Over the past five years, UTTC's graduation rate has averaged 58 percent. An average of 72 percent of those students completing their programs have obtained employment within a year.

The population served by UTTC is a low-income group. Approximately 75 percent of each class in the past five years have received full Pell Grants; the remainder have been funded by grants from the Bureau of Indian Affairs.

To serve its population effectively, UTTC must remedy certain needs in the areas of housing, facilities, and training equipment. These include:

- Major repairs and renovations to much of the campus' existing facilities, fast approaching a century in continuous use. Roofs and windows are in most pressing need of repair to prevent heat loss and further deterioration of supporting brick walls. Substantial interior repairs are also needed to make dormitories for single students more habitable;
- Additional construction of new family housing, single-student dormitories, multi-purpose classroom and office space, child care facilities, and a student union; and
- More state-of-the-art training equipment that reflects current practice in the occupational areas for which UTTC is preparing its students.

The college is currently faced with four primary financial problems that prevent it from meeting these needs:

- The Bureau of Indian Affairs -- its major source of funding -- does not allow its appropriations to be spent on major renovation and construction;
- The college has had difficulty finding other sources of public or private funding that will support major capital improvements;
- Below normal indirect cost returns from several contracts have restricted the amount available for repairs and equipment purchases; and
- A lack of collateral prevents the college from leasing facilities or securing loans for capital improvements.

The fact that its grants are subject to annual renewal means that long-term planning is difficult, at best.

Crownpoint Institute of Technology

CIT's mission is to provide high quality and relevant vocational-technical programs and continuing education services, primarily for the people of the Navajo nation. In 1991-92 it offered one-year certificate programs in 11 areas to an enrollment of about 150 students. Because 60 to 70 individuals remain on the waiting list each year and the Navajo nation pays to send numerous people off the reservation for a vocational-technical education, staff would like to expand enrollment to 600 and extend programs into a variety of new fields and two-year degree programs. Over the past five years, about three-quarters of enrolled students completed their programs of study, and about 54 percent of those found employment within a year.*

At the same time that goals have been set to expand and improve course offerings, the college is experiencing a crisis in its facilities. Although the buildings are not old (most were constructed in 1979), the main structure which houses administrative staff, classrooms, and training bays must be demolished in the fall of 1992 because of structural problems. It will be replaced by temporary modular buildings, but these, in turn, need to be replaced by permanent structures (and the school and construction staff held accountable for durable construction).

If CIT is to expand, other facilities also need to be constructed: a new dormitory for single students, family housing, additional housing for faculty and staff, recreational and athletic facilities, and maintenance facilities. Renovations are needed to the support services building to increase the size of its cafeteria and improve its spatial layout.

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* Faculty noted that most of those who did not find employment chose not to work or could not find work near their homes and chose not to move away; CIT helped find employment for virtually all students who were willing to move to locate a job.

A Campus Master Plan has been developed by a local architectural firm responding to these needs. It estimates the cost of accomplishing all of the required work at over $27 million dollars. The central challenge, which is addressed in the second report in this volume, is the assignment of priorities to the building plans and development of a time frame for completion.

Summary

If the two schools are to realize their goals for expansion of enrollment and delivery of state-of-the-art instruction, they must satisfy three facilities and training equipment needs:

- The need for major renovation of existing facilities, particularly at UTTC;
- The need for construction of new housing at both schools and administration, classroom, and recreational facilities at CIT; and
- The need for regular procurement of state-of-the-art vocational training equipment commensurate with the institutions' instructional programs.

Options for meeting these needs are evaluated in the companion volume to this report, where we examine the schools' goals in the context of tribal economic development plans and the states' employment projections.

CHAPTER 1

INTRODUCTION

Section 389(a) of the Carl D. Perkins Vocational and Applied Technology Education Act Amendments of 1990 mandates "a detailed study of the training and housing needs" of the two institutions eligible for aid under Section 384 of the Act. These institutions are the United Tribes Technical College (UTTC) in Bismarck, North Dakota, and the Crownpoint Institute of Technology (CIT) in Crownpoint, New Mexico. Section 389(a) further states that the study "shall include an examination of -- (A) training equipment needs; and (B) housing needs of families whose heads of household are students and whose dependents have no alternate source of support while such heads of household are students." In this report, we have extended the specific purposes of the Act to include a study of (1) the institutions' training facilities and equipment and student housing, and (2) the institutions' needs for renovation or construction of facilities and repair or purchase of equipment. The government may use these study findings to aid its decisions about the appropriate allocation of funds to meet the institutions' needs.

Currently, there are two institutions eligible for aid under this program: the Crownpoint Institute of Technology (CIT) in Crownpoint, New Mexico, and the United Tribes Technical College (UTTC) in Bismarck, North Dakota.[1] To assess their training facilities and equipment

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[1] Under Section 384 of the Carl D. Perkins Vocational and Applied Technology Education Act Amendments of 1990 (Public Law 101-392), a tribally controlled postsecondary vocational institution is eligible for assistance under this law when it:

"(1) [is] governed by a board of directors or trustees, a majority of whom are Indians;

"(2) demonstrate[s] adherence to stated goals, a philosophy or a plan of operation which fosters individual Indian economic and self-sufficiency opportunity, including programs which are appropriate to stated tribal goals of developing

(continued...)

and the housing available for students, we collected information on the schools from the Bureau of Indian Affairs, the schools' accreditation agency, and the Department of Education. In addition, we conducted two-person, three-day site visits to each institution to collect and review institutional documents, examine the training facilities and equipment and student housing, and interview administrators, staff, faculty, and students.

This report is the first of two documents describing the results of the study. It contains a description of the mission and goals of each institution; a snapshot of the programs offered by each; a description of the current training facilities, equipment, and student housing; a discussion of the finances supporting the programs and facilities; an assessment of the degree to which facilities and equipment needs can be met by the current financial structure; and an examination of outstanding needs that require additional funding. The second report places the institutions' facilities and equipment needs in the context of the five-year economic development plans of the tribes served by the institutions and the employment projections of the states in which the institutions are located. It then projects the institutions' needs for improved training facilities and equipment and student housing for the next five years and the costs associated with fulfilling them. These reports respond to the requirements specified in Section 389 of the Carl D. Perkins Vocational and Applied Technology Education Act Amendments of 1990 (Public Law 101-392).

Both reports are organized around a comprehensive set of research questions, outlined below. The final section of this chapter is a discussion of the methodology of the study. The second chapter presents the findings for UTTC; the third chapter for CIT. The last chapter of

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[1] (...continued)
individual entrepreneurships and self-sustaining economic infrastructures on reservations;
"(3) [has] been in operation for at least 3 years;
"(4) hold[s] accreditation with or [is] a candidate for accreditation by a nationally recognized accrediting authority for postsecondary vocational education; and
"(5) enroll[s] the full-time equivalency of not less than 100 students, of whom a majority are Indians."

the report summarizes key findings for the two schools in terms of needs for facilities and equipment.

Research Questions

We have framed research questions for this evaluation in four areas:

- Academic Program Philosophies and Goals
- Conditions and Capacities of Current Institutional Training Facilities and Equipment and Housing
- Impact of Student Housing and Service Requirements on Institutional Infrastructure
- Five-Year Projections of Institutional Training Facilities and Equipment and Housing Needs

These areas provide a framework for our project efforts. The 18 broad questions which are listed below supply more specific guidelines for the study:

Academic Program Philosophies and Goals

- What is the basic mission of the institutions, and what are their goals and priorities?
- How do the institutions adapt their programs and student service offerings to the stated economic development plans of the tribal population they serve?
- What are the institutions' major impediments to realizing their goals and to serving the tribes' economic development needs optimally? Do these impediments involve institutional facilities and/or equipment?
- How have the institutions improved their programs and services over time? What are their plans over the next five years, particularly in the areas of training facilities and equipment and student housing?
- What are the institutions' most pressing needs in these areas?

Conditions and Capacities of Current Institutional Facilities and Equipment

- To what degree are the conditions and capacities of facilities and equipment offered by the institutions adequate to meet the needs of the student, faculty, and staff populations they serve?
- What is the cost of maintaining and/or replacing current facilities and equipment? How much of this cost can the schools absorb?

- To what degree are the institutions' incomes and cash flows adequate to support their current facilities and equipment requirements?

Impact of Student Housing and Service Requirements on Institutional Infrastructure

- What training and ancillary support services--such as financial aid, career counseling, on-campus housing, recreational and parking facilities--are currently offered to students attending the two institutions?
- What are the facilities and equipment needs associated with these student services?
- What is the quality and availability of student training and related support services? What limitations are placed on training and services due to limitations in institutional facilities, equipment, and housing?
- To what degree does the cost of housing and/or commuting to the institutions prohibit students from attending them or finishing their course of training?
- How has the need for improved or additional training facilities, equipment, and/or housing been determined?
- What is the anticipated cost of renovating, buying, or constructing enough additional facilities and purchasing equipment to meet student and staff training and ancillary service needs?
- To what degree are the institutions' incomes and cash flows adequate to support their anticipated facilities, equipment, and housing requirements?

Five-Year Projections of Institutional Training Facilities and Equipment and Housing Needs

- In the next five years, what are the priorities for meeting facilities, equipment, and housing needs?
- What are the costs associated with meeting these needs?

The questions concerning the basic mission and goals of the institutions; conditions and capacities of current institutional facilities, equipment, and housing; and impact of student housing and service requirements on institutional infrastructure are addressed in this report. The placement of needs in the context of tribal and institutional five-year plans, the assignment of priorities to needs, and the five-year projections of costs to meet the needs are discussed in the companion report.

The Data Collection Process

Addressing the research questions required the collection of detailed information regarding the two institutions' current and projected training facilities and equipment and housing capacities and needs. This information was gathered through reviews of documents describing the institutions and site visits by Pelavin Associates staff.

Review of Documents

Pelavin Associates collected and reviewed the following sets of data:

- Bureau of Indian Affairs records;
- Economic development plans of the tribes served by the institutions;
- Accreditation reports from the North Central Association (NCA) of Colleges and Schools for the two institutions;
- Applications for funding under the Tribally Controlled Postsecondary Vocational Institutions Program submitted to the U.S. Department of Education, Office of Vocational and Adult Education; and
- Documents available at the institutions describing facilities, housing, and/or equipment needs and the costs of meeting these needs.

Site Visits

The site visits were conducted in January 1992. Each lasted three days and involved two staff members. During the visit we collected the most current and accurate data available from the institutions; examined existing training facilities, equipment, and housing; and interviewed administrators, staff, faculty, and students about the capacity and quality of current training facilities, equipment, and housing and their assessment of necessary changes, additions, or improvements. The individuals interviewed at each institution included the president, chancellor, chief business officer, registrar, head of buildings and grounds, admissions officer, financial aid officer, academic counselor, employment or career counselor, personal and family counselor, health care staff, head of food services, head of housing, head of campus child care and/or elementary education services, a sample of faculty, and a sample of students.

Organization of the Report

In the following two chapters we present the results of these data-gathering efforts in a description of each of the institutions. Each chapter covers the following topics:

- The mission and objectives of the school;
- Characteristics of students;
- Conditions of, capacities of, and needs for campus facilities;
- The state of training equipment and needs for additional equipment;
- Current financial picture of the institution; and
- A summary of facilities and equipment needs to meet institutional goals.

Following these chapters is a discussion of issues that crosses institutional boundaries and provides a framework for the second report that will project the needs of the institutions over a five-year period.

CHAPTER 2

FACILITIES AND EQUIPMENT NEEDS OF UNITED TRIBES TECHNICAL COLLEGE

Introduction

In this chapter, we discuss the facilities and training equipment conditions, capacities, and needs of the United Tribes Technical College (UTTC) in Bismarck, North Dakota. First, we describe the mission and objectives of the college. Then, to provide a context for our assessment of campus facilities, we offer a brief demographic overview of the college's students. In assessing the facilities, we describe the campus, summarize the college's primary facilities problems, and discuss the difficulties that prevent the college from dealing with these problems. Thereafter, we detail the conditions, capacities, and needs of student housing, instructional facilities, faculty/administrative offices, student support service facilities, and child care and education facilities. Next, we discuss the training equipment needs of UTTC's vocational programs, as described to us by the instructors in those programs. Finally, we outline the college's current financial picture as it relates to facilities and training equipment.

Mission and Objectives

Now entering its third decade under American Indian management, United Tribes Technical College (UTTC) is a unique vocational, residential "institution with a commitment to the American Indian individual and family."[2] Since 1971, the college[3] has been directly owned and operated under contract with the Bureau of Indian Affairs (BIA) by an inter-tribal organization which draws from tribes on the five reservations located wholly or partly in North Dakota.[4] Governed by a 10-member board of directors made up of the tribal chairperson and one other representative from each of the five United Tribes, the college has always served "Indian people who share a common point of view and the desire to seek a grassroots vocational education in a community setting."[5] Furthermore, as a result of grants from the Federal government, the college has always provided its services free-of-charge to almost all of its students.

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[2] *United Tribes Technical College General Catalogue, 1991-1993,* p. 9.

[3] Formerly United Tribes Employment Training Center, 1969-1975, and the United Tribes Educational Technical Center, 1975-87.

As a campus-based vocational-technical institution serving an economically disadvantaged population, the college plays a vital--and perhaps unique--role in meeting the needs of its constituents. Before entering UTTC, many of its students are unable to earn self-sustaining wages. Though a recent poll of the school's student body indicated that only five percent were unemployed before enrolling, school administrators note that most other students were employed in menial labor, often on only a part time or temporary basis. On average over the last five years, 25 percent of students have been single mothers. Forty percent have never lived off their reservations. Almost all students are unable to pay for any portion of their educational or living expenses while at UTTC. Most married students would not be able to attend the institution if their children's expenses were not covered as well. Yet, by providing the personal and family support services that enable them to obtain a vocational education, UTTC attempts to create an ever-growing group of economically self-sustaining American Indian individuals and families.

The UTTC training program attempts to provide its students with both the vocational skills they will need to be self-supporting and the various individual and social skills they will need to be responsible parents and members of their communities and the larger society. Specifically, the UTTC mission is:

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[4] Three Affiliated Tribes (Mandan, Hidatsa, and Arikara) of Fort Berthold at New Town, the Devils Lake Sioux at Fort Totten, the Standing Rock Sioux at Fort Yates, the Sisseton-Wahpeton Sioux, and the Turtle Mountain Band of Chippewa at Belcourt.

[5] *General Catalogue,* p. 7.

> "to provide an environment in which students and staff can discover, examine, preserve and transmit the technical knowledge, cultural values, and wisdom that will ensure the survival of Indian people in the present and future generations, while increasing individual opportunities to improve the quality of life. The college seeks to initiate and sustain educational and economic programs aimed at self-sufficiency and realization of self-determination to the American Indian Community."[6]

In addition, UTTC serves as "a focal point for inter-tribal discussion of tribal rights and economic progress."[7]

Guided by its mission, the college has established five basic objectives:

1. To provide vocational skills education in occupational areas that have maximum job placement potential;
2. To provide supportive services in areas of adult basic education, personal development, vocational and guidance/counseling, social services and job placement services that will assist students in their quest towards the realization of their opportunities and responsibilities in society;
3. To provide an environment that enhances the development of self-sufficiency, self-determination, and ethnic pride by admitting families, single parents, and individuals living as a community with its own day-care center, elementary school, health care, and cultural and recreational facilities;
4. To promote the educational, economic and social growth of each individual to the highest possible level of personal and professional competence by continually researching and improving curricula and programs that are current with the changing world; and
5. To provide an inter-tribal forum and special projects aimed at the perpetuation of the tribal rights and economic progress of American Indians.[8]

UTTC has been accredited at the certificate and Associate of Applied Science (AAS) degree level by the North Central Association of Colleges and Schools and hopes to be placed on a standard five-to-10-year accreditation schedule this spring. It offers two-year AAS degrees in business administration, criminal justice, licensed practical nursing (LPN), and medical records technology. By the beginning of the 1992-93 academic year, UTTC expects to upgrade its early childhood education and automotive technology offerings from the current one- and two-year certificate programs to two-year AAS degree programs. One-year certificates are also currently available in the fields of: business-clerical, carpentry, criminal justice, electrical, food service, medical records, plumbing, and welding. In addition to these vocational programs, one-third of UTTC students' courses are now in the field of general education.

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[6] *General Catalogue*, p. 9.

[7] *General Catalogue*, p. 10.

[8] *General Catalogue*, p. 10.

As of spring 1992, all of UTTC's programs will be offered on a nine-month, semester-based academic calendar. In recent years, the college has offered several summer programs as well, including a nurse's assistant sequence; a fast-track program for criminal justice students; an intensive autobody repair and painting course; and a remedial math program.

Student Characteristics

Over the past five years, UTTC has enrolled between 207 and 284 students (see Exhibit II-1).[9] UTTC is unique among Indian higher educational institutions because it admits students from such a variety of tribes (over 30) and takes approximately one-third of its students from outside the Dakotas. While the percent of students from the United Tribes has ranged from 40 to 60 percent, on average over the five-year 1987-92 period, students have been divided almost evenly between United Tribes members and non-members. Most non-members have been Apache, Crow, or Cheyenne. With the exception of a few students admitted into the LPN

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[9] Unless otherwise noted, all figures cited in this section are from this table and/or a frequency analysis provided by UTTC administrators. Missing figures are still forthcoming from UTTC.

EXHIBIT II-1

UTTC ANNUAL STUDENT ENROLLMENT[1]

Category	1987-88		1988-89		1989-90		1990-91		1991-92	
	M	F	M	F	M	F	M	F	M	F
Total Enrollment	**106**	**101**	**117**	**115**	**110**	**119**	**107**	**137**	**135**	**149**
Age brackets										
16-25	53	52	58	60	46	38	55	70	69	75
26-30	25	25	26	27	6	16	20	37	31	34
31-35	13	12	9	11	7	12	15	14	16	18
36-40	10	7	10	11	2	2	11	11	12	13
>40	5	5	6	6	1	0	6	5	7	9
Unknown					42	51				
Tribal affiliation										
Three Affiliated Tribes	8	8	12	12	16	8	17	8	22	15
Devils Lake Sioux	1	2	6	5	5	6	6	8	6	4
Sisseton-Wahpeton Sioux	1	3	5	5	12	8	10	10	2	6
Standing Rock Sioux	20	23	30	26	12	10	10	14	21	21
Turtle Mountain Chippewa	12	16	16	23	8	8	22	19	13	11
Other:	64	49	48	44	51	79	42	78	71	92
None										

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[1] Source: UTTC's Registrar, January 1992.

EXHIBIT II-1 (Cont.)

UTTC ANNUAL STUDENT ENROLLMENT

Category	1987-88		1988-89		1989-90		1990-91		1991-92	
	M	F	M	F	M	F	M	F	M	F
State of residence prior to enrollment										
North Dakota	44	43	61	64	36	31	50	42	62	50
South Dakota	32	23	16	19	31	47	25	48	34	41
Minnesota	0	0	2	2	0	0	3	3	1	1
Montana	10	17	17	22	19	23	12	19	19	17
Utah	1	3	3	0	2	5	0	0	0	0
Iowa	0	0	0	0	3	2	0	0	0	0
Wyoming	0	0	19	4	6	2	0	0	0	0
Living										
On-campus[*]	~106	~101	~117	~115	~110	~119	~107	~137	~135	~149
Off-campus (within 30 mi.)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Off-campus (more than 30 mi.)	0	0	0	0	0	0	0	0	0	0
Unknown	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Full time vs. part time										
Full time, certificate or degree-seeking	106	101	117	115	110	119	107	137	135	149
Full time, non-degree-seeking	0	0	0	0	0	0	0	0	0	0
Part time, degree seeking	0	0	0	0	0	0	0	0	0	0
Part time, non-degree-seeking	0	0	0	0	0	0	0	0	0	0

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[*] All students, with rare exceptions, live on campus; exact numbers of the few students living off-campus are unavailable from UTTC.

EXHIBIT II-1 (Cont.)

UTTC ANNUAL STUDENT ENROLLMENT

Category	1987-88		1988-89		1989-90		1990-91		1991-92	
	M	F	M	F	M	F	M	F	M	F
Marital status										
Married	29	30	26	31	38	36	25	36	26	24
Single	77	71	91	84	72	83	82	101	109	124
Separated/Divorced/Widowed	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Number of students with dependent children	18	107*	11	58	22	61	19	58	14	50
Number of students completing degree	51	40	38	41	38	33	36	25	43	30

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* This large number is due to considerable student attrition and replacement enrollment.

program on a space-available basis, all UTTC students are registered members of American Indian tribes.

UTTC has typically served a much older group of students than its non-Indian counterparts, but this has been changing recently. When the college first opened, the average age of its students was nearly 40; today it is just under 30. Since 1987, half of UTTC's students have been between 16 and 25 years old, and an additional 23 percent have been between 26 and 30. Women have outnumbered men at UTTC in all except one of the last five years, but the student body has always been at least 45 percent male. The fraction of students who are married has ranged from a high of 33 percent in 1987-88 to a low of 17 percent in 1991-92. On average, over the 1985-1990 period, 25 percent of students were single parents and 22 percent were heads of two-parent families. Single males and females without children made up 35 and 18 percent, respectively, of the population.[10]

Many of the students (60 percent) have lived off the reservation before, but for the 40 percent of students who have never lived off the reservation, the transition to student life at UTTC can be quite a challenge. Nearly all students (98.5 percent) have had at least some high school education, and nearly half have had some vocational or postsecondary education. By attending UTTC, approximately two-thirds are obtaining a higher level of education than their parents received.

As noted earlier, only five percent listed themselves as unemployed before coming to UTTC, but, according to administrators, many of the remaining 95 percent were probably engaged in only temporary or seasonal work. According to the 1990 *UTTC Self-Study Report*, "approximately 98 percent of UTTC students are from economically disadvantaged backgrounds and have had poor academic preparation prior to enrollment at UTTC."[11] Approximately 50 percent of incoming students score below the eighth-grade level in reading, 84 percent score below the eighth-grade level in math, and 56 percent score below the eighth-grade level in science.[12]

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[10] *UTTC Self-Study Report*, February, 1990, p. 24.

Since the great majority of UTTC's students live too far from the campus to commute, they would be unable to attend the college without the provision of residential facilities. In addition, because most of its students come from academically and economically disadvantaged backgrounds and bring spouses and children with them, UTTC's stated mission is to provide its education in a residential setting that offers a variety of critical support services, such as child care, counseling, and medical care.

In 1987-88, 63 percent of enrolled students at UTTC received their degrees or certificates; in 1988-89, the figure was 68 percent; in 1989-90, 62 percent; in 1990-91, it fell drastically to 32 percent; but in 1991-92, it was again over 60 percent.[13] Of the students who graduate, however, a majority have been placed in full time employment for three of the four years for which complete data are available. Exhibit II-2 provides these employment placement figures.

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[11] *Self-Study Report*, p. 24.

[12] *Self-Study Report*, p. 98.

[13] According to UTTC's director of research and development, these figures underestimate true graduation rates, since they do not account for those students who left UTTC to *transfer* to another institution and those who "stop out" for a number of years but eventually return to finish their degrees. He also noted that UTTC's graduation rates compare favorably with those cited in a 1989 survey of institutions with 75 percent or higher American Indian enrollment. At these institutions on average, 53 percent of students drop out after their first year of postsecondary education, and 75 percent do not complete their degree. Division of Policy Analysis & Research, American Council on Education, *Research Briefs*, Vol. III, No. 3, Washington, DC: 1992.

EXHIBIT II-2

UTTC EMPLOYMENT PLACEMENT RATES[1]

Category	1987-88	1988-89	1989-90	1990-91	1991-92
Number of students completing degree	91	79	71	61	73
Number of students finding full time employment,[2] among those who complete their degree/certificate*	72	39	58	47	N.A.
Full time placement rate (%)	79	49	82	77	N.A.

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[1] Source: UTTC Registrar, August 1992.

[2] Within one year of graduation.

* Part time placement rates not available.

Campus Facilities--Conditions, Capacities, and Needs

UTTC occupies the 105-acre site and buildings of what was once the U.S. Army's Fort Lincoln. Exhibit II-3 provides a map of the campus.[14] The institution's original buildings, which comprise 33 of its 110 facilities (11 of which are condemned), were constructed shortly after the army purchased the land in 1903. The army used the facility as an internment camp for Japanese and German prisoners during World War II. In 1948, the fort was designated as the headquarters for the U.S. Army's Corps of Engineers, Garrison Division. As such, it was the base of operations for planning and construction of nearby Garrison Dam. Between 1966 and 1968, the site was remodeled for use as a Job Corps center. At the end of 1968, the United Tribes of North Dakota Development Corporation (UTNDDC) acquired the property in order to develop a tribally controlled postsecondary vocational training institution. Since its dedication in September 1969, the college has seen the addition of a major instructional facility (the Skill Center), gymnasium, cafeteria, day-care center, and elementary school. No new construction has occurred at the campus since the new gymnasium was built in 1983.

The campus is spacious, tree-lined, and aesthetically pleasing. UTTC's original buildings are large, graceful structures that have been placed on the State[15] Registry of Historic Places. Despite the beauty of the campus, however, the college has two major problems with its facilities.

First, many of the nearly 100-year-old original buildings--currently utilized as dormitories, classrooms, and offices--are in need of major renovation and repairs. The exteriors of these buildings are in poor condition. Old roofing is causing water damage to the brick facades, porches and steps are hazardous, and deteriorating window frames create energy inefficiencies.

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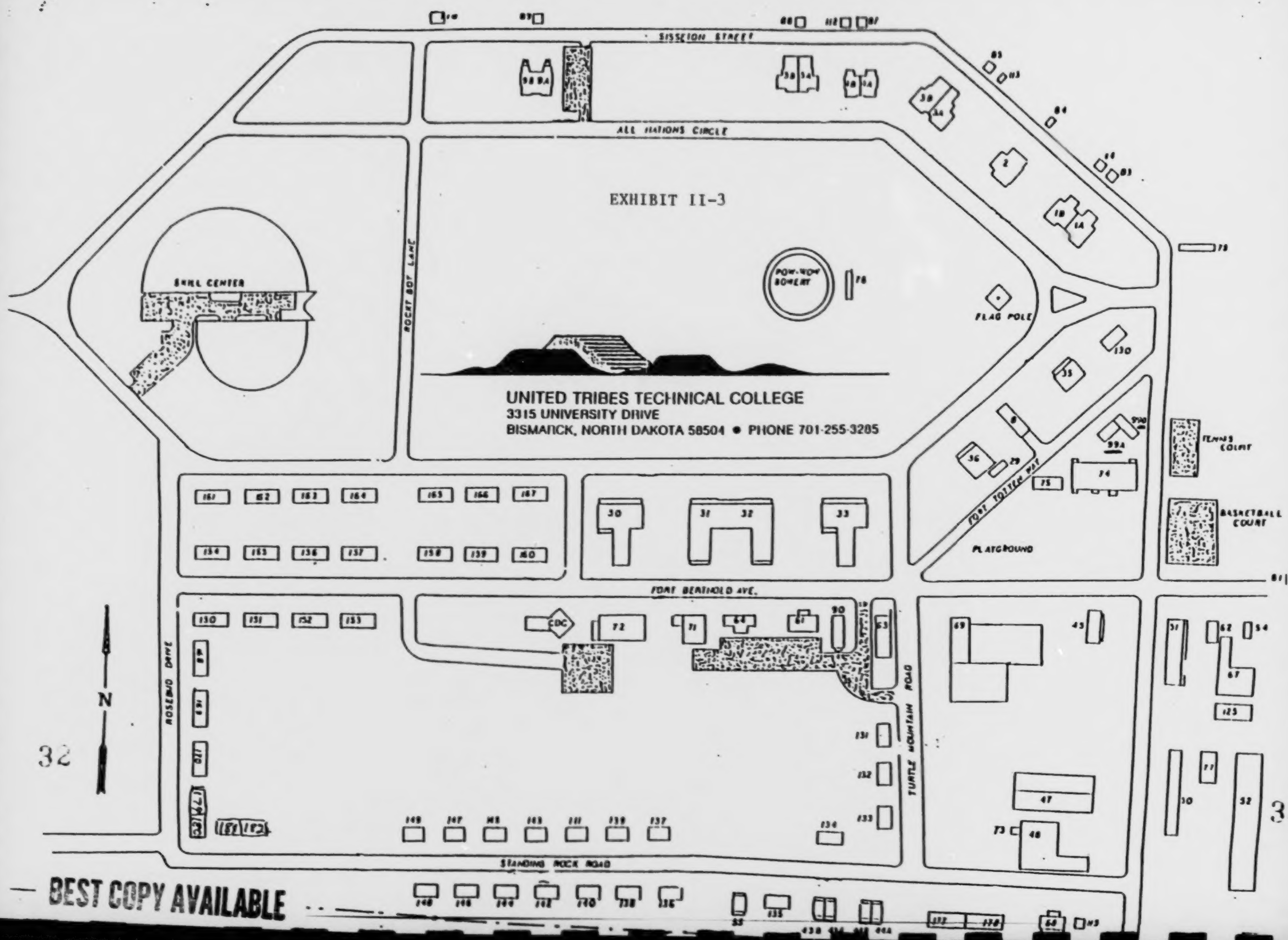
[14] Buildings #110, 89, 88, 112, 87, 85, 113, 14, 93, 83, and 73 have all been condemned and are scheduled for demolition.

[15] UTTC is currently investigating the legal ramifications of this historical designation. Administrators believe that the campus has been nominated for national historical designation, but they have not received final confirmation on this.

# EXHIBIT II-3

UNITED TRIBES TECHNICAL COLLEGE
3315 UNIVERSITY DRIVE
BISMARCK, NORTH DAKOTA 58504 • PHONE 701-255-3285

SISSETON STREET
ALL NATIONS CIRCLE
SKILL CENTER
ROCKY BOY LANE
POW-WOW BOWERY
FLAG POLE
FORT TOTTEN WAY
PLAYGROUND
TENNIS COURT
BASKETBALL COURT
FORT BERTHOLD AVE.
ROSEBUD DRIVE
TURTLE MOUNTAIN ROAD
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Heating, plumbing, and electrical systems installed many decades ago often do not work properly and, in some cases, create fire hazards. Because the heating systems were designed for the large, original rooms, the extensive partitioning into smaller rooms and offices has rendered many of the old heating and ventilation systems ineffective and inefficient. Many buildings are overcrowded and do not optimally serve the purposes for which they are being used. In addition, all but the gym and one instructional building lack handicapped access. And finally, even though married and single parent housing was built more recently, the units nevertheless require major repair due to heavy use and cheap original construction. Exhibit II-4 provides an inventory of campus buildings and summarizes average annual maintenance and utilities costs.

Due in part to the age of the college's facilities, estimated utility costs this year total $441,677. Moreover, in testimony before the United States House of Representatives Appropriations Committee for Interior and Related Agencies in both 1990 and 1991, UTTC President David Gipp stated that, since 1979, electricity costs for the college have risen 20 percent and gas costs 113 percent. Gipp noted that, despite strict conservation, these utility costs contribute to the institution's ongoing, precarious financial condition.

Second, UTTC is in need of entirely new facilities. This is particularly the case in the area of family housing, although single-student housing is also at or near capacity. Faculty, students, and administrators consistently and independently described student housing as UTTC's first priority. The college's instructional training facilities can accommodate approximately 400 students, but the college has only admitted a maximum of 284 students each year to date, since they do not have housing accommodations for more. Most single-student candidates who apply for admission can be housed now, but according to administration officials, admissions waiting lists for family housing have recently approached 100 candidates. This year, the list numbers 99 candidates, and last year, it stood at 97, almost all of whom wait between six months and a year for housing on campus. In 1987-88, 85 students were denied admission after being wait-listed; in

EXHIBIT II-4

INVENTORY OF UTTC FACILITIES[1]

Bldg. #[2]	Building Name	Estimated Replacement Cost	Estimated Value	Sq. Footage	Insurance Cost	Estimated Utilities Cost Per Year	Average Annual Maintenance
1A-1B	Russell Hawkins Conference Ctr., President's Dorm	$947,025	$150,000	13,500	$1,437	$16,200	$2,000
2	Kateri Hall Women's Dorm	510,692	100,000	7,280	1,291	8,736	1,000
3A-3B	Student Residence Bldg.	1,031,205	150,000	14,700	437	17,640	1,000
4A-4B	Security Staff Housing	621,248	100,000	8,856	291	10,627	1,000
5A-5B	Financial Aid/Four Winds Dorm	841,800	150,000	12,000	437	14,400	1,000
9A-9B	Administration	817,851	150,000	8,856	437	10,627	2,000
200	Skill Center	5,240,031	3,500,000	56,741	11,285	68,089	5,000
33	Sitting Bull Hall/Property & Supply	1,720,639	550,000	24,528	437	29,433	1,000
31-32	Education Building	4,283,931	1,000,000	46,388	3,321	55,665	2,000
30	Sakakawea Hall/Nursery	1,720,639	450,000	24,528	437	29,433	1,000
35	IEA North Central Indian Tech. Assistance Center II	471,354	200,000	5,104	291	6,124	500
8	Garage	28,704	25,000	1,248	-0-	-0-	100
36	Cultural Center & Gift Shop	354,624	75,000	3,840	291	4,608	500
99A&B	Student Residence	123,286	50,000	2,258	145	2,709	250
74	Theodore Jamerson Elementary	573,493	100,000	6,210	291	7,452	500
75	Theodore Jamerson Elementary	132,984	75,000	1,440	364	1,728	250
45	Theodore Jamerson Elementary	138,525	75,000	1,500	364	1,800	100
51	Theodore Jamerson Elementary	572,570	50,000	6,200	146	7,440	100
51	UTTC Print Shop	772,570	50,000	6,200	146	7,440	500
71	Theodore Jamerson Elementary	189,594	50,000	2,053	189	2,463	250
100	Child Development Center	569,709	350,000	6,169	1,122	7,402	500
69	James Henry Community Center	1,672,904	1,000,000	26,470	3,015	31,764	500

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[1] Source: UTTC's Director of Facilities, January 1992.

[2] Building numbers refer to those on campus map (Exhibit II-3).

EXHIBIT II-4 (Cont.)

INVENTORY OF UTTC FACILITIES[*]

Bldg. #[2]	Building Name	Estimated Replacement Cost	Estimated Value	Sq. Footage	Insurance Cost	Estimated Utilities Cost Per Year	Average Annual Maintenance
47	Maintenance Department	150,000	702,201	14,016	582	16,819	250
48	Transportation Department	312,624	150,000	6,240	582	7,488	250
63	Security/Safety Department	109,568	50,000	2,187	146	2,624	1,000
81	Storage Building	4,301	1,000	187	-0-	-0-	100
54	Storage Building	8,464	5,000	368	-0-	-0-	100
62	Storage Building	20,148	25,000	876	-0-	-0-	100
67	Storage Building	80,086	25,000	3,482	-0-	-0-	100
125	Storage Building	34,776	20,000	1,512	-0-	-0-	100
52	Storage Building	289,340	75,000	12,580	-0-	-0-	100
50	Storage Building	75,578	50,000	3,286	-0-	-0-	100
77	Storage Building	41,883	15,000	1,821	-0-	-0-	100
66	Storage Building	20,240	5,000	880	-0-	-0-	100
177-178	Touchstone Lodge	202,032	100,000	2,880	291	3,456	500
43A-43B	Staff Housing	232,814	75,000	4,264	218	5,116	200
44A-44B	Staff Housing	232,814	75,000	4,264	218	5,116	200
150-170	Student Housing (21 units)	1,043,406	525,000	32,235	1,527	38,682	10,000
72	Cafeteria	377,620	150,000	5,841	685	7,009	2,000
64	Chapel	86,868	50,000	1,591	175	1,909	200
61	JTPA/Minority	542,927	100,000	3,300	291	3,960	200
179&182	Student Housing	141,960	50,000	2,600	146	1,500	500
130-149	Student Housing (20 units)	496,860	500,000	18,200	1,455	1,092	500
55	Student Housing	179,717	40,000	2,782	116	3,338	500
68	Chemical Health	93,096	50,000	1,440	146	1,728	500
TOTALS		$28,664,699	$10,666,000	412,901	$30,782	$441,677	$38,750

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[*] Building numbers refer to those on campus map (Exhibit II-3).

1988-89, the number as 74; and in 1989-90, it was 77. As mentioned previously, because almost all students require full financial support for their tuition, board, and living expenses to attend the institution, they are unable to afford off-campus housing. Their financial aid sources--primarily their tribes--will not pay for them to be housed off campus, since it is considerably more expensive than on-campus housing. Thus, with rare exceptions, all of the student body lives on campus. More students could be accommodated at UTTC without the need for new facilities, if the college's student body was less than 100 percent residential. However, this would contradict the college's basic mission and make enrollment impossible for the large majority of the student body that lives outside a reasonable commuting range.

With its current budget, which will be discussed in detail later, UTTC is incapable of meeting either its facilities renovation or construction needs. The institution's major source of funding is the BIA, which does not allow its appropriations to be spent on major renovation and construction. Because the institution's land and buildings are leased[15] rather than owned, the college has no collateral to obtain a commercial loan for the major renovation and construction it needs. In addition, administrators have found that most foundations have shifted to a programmatic focus and will not fund construction or maintenance.

UTTC's efforts to repair the campus' original buildings have been hindered by the fact that they are on the North Dakota State Historical Registry. While the Registry designation is not accompanied by any funds, all repairs to designated facilities must meet the Historical Society's specifications for architectural authenticity. As such, the college has been prevented from using modern storm windows, roof materials, and porch railings on the old buildings. Instead, they must purchase materials (e.g., slate roofing tiles) that cost much more than their modern equivalents. This past summer, for example, it cost the college $68,540 to repair the porches on the largest campus building in accordance with Historical Society specifications. Normally, such repairs would have cost only $27,970. Most of these repairs are performed by the seven-member maintenance staff.

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[15] UTTC's 30-year quit-claim deed expires in 1999, at which time the college will assume full ownership of the land and buildings.

Below, we discuss UTTC's specific facilities needs in the areas of housing, instructional services, offices, student support, and child care support.

Student Housing

UTTC's housing facilities consist of five dormitories for single students and 50 units for families and single parents. Single-student housing can currently accommodate most single students who seek admission to the institution. However, the majority of this housing is in poor--and sometimes hazardous--condition. Married or single-parent housing also needs major repairs and is in short supply.

Single-Student Housing

Two of the smaller dormitories are designated as the men's and women's honor dorms, and one (Touchstone Lodge) as a special dormitory for male recovering alcoholics or substance users.[16] Sitting Bull Hall is the largest dormitory and is used for all other single male students. Sakakawea Hall is the largest residence for single females.

All dormitories suffer from exterior deterioration. As described above, many roofs, porches, and windows need immediate attention. The honor dorms appear to be in adequate condition on the interior, although the heating systems are extremely antiquated and inefficient. Furthermore, the furnishings in these and all other dormitories are quite dilapidated. Particularly noticeable were the conditions of the bedroom mattresses and commons room furniture upholstery. The facilities director purchases (or is given) most of the dormitories' furnishings in used condition from public sales at military posts throughout the state.

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[16] The administration is planning to create a similar facility for women from a section of an existing dormitory in one of the original buildings.

Generally, however, the honor dorms were clean and spacious with adequate bathroom and common room facilities. We were surprised to note that the women's honor dorm is underutilized, given the condition of the larger women's dorm. This situation was also mentioned by the NCACS accreditation team in 1990. Staff counselors told us that even though the honor dorms are more pleasant facilities, many eligible students choose not to live there in order to remain with their friends in the larger dorm.

Due to privacy concerns, we did not visit the dormitory reserved for recovering alcoholics and substance abusers. This facility, Touchstone Lodge, is a renovated trailer home purchased by UTTC in 1977. Counselors and administrators told us that Touchstone Lodge is severely overcrowded with 13-14 students. Students and a number of staff commented that even with the addition of the women's facility, there will not be enough rooms for all the students who would like help with their substance abuse problems. Given the high rates of alcoholism on most Indian reservations, it is not surprising that 80 percent of the students that UTTC counselors see have alcohol-related problems. Despite the demonstrated need for them, rehabilitation-oriented dormitories have not been built due to a lack of funds.

The single men's Sitting Bull Hall was the most dilapidated residence we saw on campus. Both faculty and counselors told us that a number of students leave the college each year because they cannot tolerate the conditions in this dormitory. Sixty-five single men are housed in this facility's cramped double-occupancy rooms, which are too small to provide desk space. Sub-ceilings were noticeably absent in spots throughout the facility, and one bathroom currently serves all the dormitory's residents. The other bathroom is currently undergoing renovation. Furnishings for the common room and bedrooms were shoddy and in disrepair. Due to overcrowding, students had no place to study in the dormitory. This is especially inconvenient because the library provides seats for only 38 students and is not open on evenings and weekends.

Currently, there is no student union facility for students to utilize as an alternate study or gathering site, and the cafeteria is open only during mealtimes.

Like Sitting Bull Hall, rooms in the single women's Sakakawea Hall are so small that few have space for desks. Bathroom toilets and sinks were in decent condition, but shower facilities were old and in need of repair. Bathroom renovation and roof re-shingling on the Sakakawea women's dormitory are some of the institution's most pressing needs in the coming year. Women in Sakakawea Hall are further disadvantaged because they share it with the college's nursery. Thus, with students, parents, and children coming and going throughout the day, privacy and noise problems affect both the residents and the nursery schoolers.

Both male and female students interviewed mentioned the need for new clothes washers and dryers in their dormitories, operable locks on their bedroom doors, and drinking fountains. They commented that bathrooms are unsanitary and that both ceilings and floors are falling apart in some areas. They particularly complained about the need for better windows and/or insulation for the dormitories. Finally, they asked for a study hall or quiet place where they could complete their homework. UTTC counselors reiterated the real need for such study areas.

As noted previously, the college has recently reached its capacity to provide single-student housing and expects greater demand for housing in the immediate future. UTTC administrators recently had the opportunity to buy an old, 25-unit "Super 8" motel to use as an additional single-student dormitory. They calculated that the purchase and transportation costs of this existing structure were considerably less than the cost of constructing a new dormitory on campus. Unfortunately, due to the lack of collateral discussed earlier, the college could not obtain a loan to finance the purchase of the property.

Family Housing

Faculty, administrators, and students describe the 42 family housing units as basically adequate, but rather plain and bare. Certainly, the units are newer than the nearly 100-year-old single-student dormitories.[17] Each unit has three bedrooms, a bathroom, living room, kitchen (with a gas stove and refrigerator), storage closet, and clothes washer and dryer. The units are fully furnished, and students are encouraged not to bring their own household furniture and appliances.

Not unlike many of their fellow students, the married couple with whom we spoke had been on the UTTC waiting list for one year after admission due to the housing shortage. Now living on campus, they feel there are a number of serious problems with the unit in which they live. They described it as cold and drafty during the winter, even when the thermostat is set at its maximum temperature of 75 degrees. They told us that many of the couples living on campus keep bags of ice on the thermostats to increase the temperatures of their houses. The couple complained about floor tiling that was coming up throughout the house, the age of the refrigerator, and the lack of curtain rods or curtains for privacy and warmth. The bathrooms in the units include tubs, but lack shower facilities, and theirs was missing towel racks and a toilet paper dispenser. Despite the general home heating problems, adequate hot water and water pressure are available. They complained, however, that the furniture upholstery is dirty, deteriorating, and in need of replacement. Despite the college's policy of encouraging students not to bring their own furnishings, the college's furniture is in such poor shape that this couple brought their own living room set. Although they had no such problem in their own unit, they knew that a number of couples had found mice in their homes.

The administration's list of maintenance needs for family housing largely verifies student concerns. It targets furnaces, floors, refrigerators, water service lines, and furniture in many of the family units for replacement or repair in the next year. Between 10 and 15 of the 50 units also are in need of new water heaters, clothes washers and dryers, and stoves.

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[17] Half of the units were built in 1970. Half were acquired in that year from Dickinson Radar Base and are estimated to have been built in 1947.

Another pressing problem for the college, however, is the lack of enough family housing to satisfy demand. This shortage creates waiting lists of 50 to 100 single parents or couples a year, as noted above. Construction will begin this April on a $565,000, 16-unit, small-family housing complex funded by a Federal grant from the Economic Development Agency Public Works Impact Program. In addition to the homes, the 8,300-square-foot complex will include a central student lounge and laundry facility. However, this new complex will satisfy only approximately 40 percent of the current need for family housing, resulting in a continued underutilization of instructional facilities that are capable of training approximately 400 students annually.[18] Construction of an additional 24 units would cost another $932,250.[19] The college would like to contract with landlords in Bismarck to provide additional housing for married students or families, but current rents are higher than tribes and other funding sources will support.

Instructional Facilities

Most instructional facilities are in much better shape than student housing, although overcrowding is a serious problem for large, general education or "core" courses with 60-100 students.[20] All students must take these core courses which include English, mathematics, psychology or sociology, "Personal Development,"[21] and humanities. Most of the general education courses are housed in the largest of the campus' original structures, which nonetheless lacks adequate space for large classes. Vice President Yellow Bird hopes to move all general education classes into the Skill Center soon, but even this facility lacks classrooms large enough to serve more than 25 students.

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[18] At a maximum, the units will provide room for 32 married students (16 units @ 2 adults/unit). Waiting lists of 50 to 100 students exist.

[19] This estimate assumes inflation in building costs of roughly 10 percent by the time they are built three to five years hence.

[20] Vocational class sizes range from 8 to 30 students.

[21] These consist of life skills courses such as Parenting, Job Skills, Substance Use Education, and Communications Skills.

The Education Building, with 23,184 square feet of classroom space, houses the licensed practical nurse, medical records, and business-clerical vocational programs, the campus library, and the college's computer center. Classroom and laboratory/computer space for the vocational programs seemed very adequate for classes of up to 25 students.

Built in 1978 under a Federal Economic Development Grant, the Skill Center is the most modern, spacious, and comfortable building on campus, housing seven of the college's vocational programs (automotive, carpentry, criminal justice, electrical, food service, plumbing, and welding), as well as some math and English general education classes. Designed in a circular fashion, with 56,741 square feet of total space, the building contains five extremely large shop areas (between 2,400 and 12,600 square feet each), eight classrooms, a conference room, administrative office, and exhibit hall. The classrooms accommodate up to 25 students. The Skill Center does not provide faculty office space, although some instructors have carved space out of their shop or storage areas. For example, one of the criminal justice instructors uses a storage closet for an office.

Shop areas are more than adequate for all vocational needs. The automotive department has two shops, one for autobody painting and repair (which is only used during the summer session) and one for auto mechanics. The latter has 30 stations in which individual students work and 7,232 square feet of room for at least half a dozen cars and a large amount of equipment. The welding shop has 15 individual booths and abundant space for large communal welders and construction projects. The criminal justice shop consists of a video screening room, large classroom area, secure walk-in weapons closet, and lockers for police uniforms and other equipment. The food service lab is an enlarged classroom with desk space as well as spacious kitchen facilities, including counter areas, two commercial-sized refrigerators, built-in cabinets, and electric stoves. Finally, the plumbing, carpentry, and electrical departments share a shop of 12,600 square feet that provides individual work/classroom areas for each discipline as well as a large central space for annual construction of a full-sized, single-story house which is sold upon completion. Thus, while there is definitely a shortage of classroom space, the surplus of lab space could, with sufficient funds, be permanently or temporarily converted into classroom space.

Faculty and Administrative Offices

Faculty and administrative office space is at a premium at UTTC. As mentioned above, individual instructors have carved makeshift faculty offices out of classroom areas or closets. Space for instructors in the Education Building is especially limited.

Administrative offices are located in three original campus buildings in generally small, partitioned rooms. Older, centrally controlled heating systems designed for much larger spaces make many of these offices either uncomfortably hot or cold. Particularly pressing is the need for records storage space; at present confidential student records are often stored away from appropriate offices in poorly secured rooms and in file drawers vulnerable to fire. Greater space is also needed to accommodate the growing numbers of computers and other office equipment.

Facilities for Student Services

Because of the demographic and educational characteristics of UTTC's students and the college's mission to provide a strong residential, family-oriented, educational community, UTTC provides a wide array of support services. Expenditures for educational support programs were in excess of $1 million this year, including salaries for the 30 educational support/student affairs employees.[22] These programs include the: admissions/student records/housing office; computer learning center; career planning and placement office; counseling department; library; student health center; chemical health center; financial aid office; recreation/athletic department; Four Winds Cultural Center; transportation department; and cafeteria.

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[22] *Self-Study Report*, p. 82.

With few exceptions (i.e., recreation/athletics, transportation, and cafeteria), the student services offices are located in the pre-1910 Ft. Lincoln buildings. While each service has unique functions and needs, they are all affected by the age and condition of these original buildings. As noted earlier, the heating and ventilation systems are antiquated and air conditioning is virtually nonexistent. Thus, despite extremely high utility costs, it is difficult to maintain comfortable temperatures within the buildings. The interior layout of the buildings is often the product of makeshift partitioning. Such partitioning rarely provides the privacy needed for the variety of counseling offered by student services and exacerbates heating and ventilation problems. Finally, few of the student services buildings are accessible to the handicapped.[23] While there have not yet been instances where such accessibility was an issue, changing Federal guidelines and a genuine concern about the accessibility of the college necessitate action in this area.

In an atmosphere where community is stressed, the condition of support services vital to the maintenance and healthy growth of that community is crucial. The following section provides a summary of the ability of the services' staff to meet current and projected student needs, given existing facilities. Estimates of future needs are predicated on the addition of 100 students (and, thus, construction of new housing) and a total campus enrollment of nearly 400 students. For those services located in old Ft. Lincoln buildings, the drawbacks discussed above are assumed and further detail is provided only for problems unique to the service under question.

- Admissions, registration, students records, housing assignments, and the Computer Learning Center are all located in the Education Building. Neither the small size nor the condition of the building are serious impediments to the daily functioning of these services.

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[23] The Education Building which houses many of the student services is scheduled to have an elevator installed along an outside wall, but the other buildings need ramps or other accommodations.

- The Career Planning and Placement Office and the Counseling Department are also housed in the Education Building. Career Planning and Placement has two counselors who share an office; the Counseling Department has five counselors whose offices were created by partitioning a larger area. While the space is adequate in terms of square footage, its layout does not provide for private interactions.

- The Library (in the Education Building) currently provides approximately one seat for every seven students. With an additional 100 students, the ratio will be one seat for every 10 students. Given the overcrowding in the dormitories and the lack of space for quiet study there, the small size of the library is a major problem. Also, the college would like to expand the library's collections, requiring more efficient shelving and/or an expanded facility.

- The Student Health Center, located in the Education Building, and the Chemical Health Center, located in its own building, have the facilities to serve student health needs well. But emergency transportation is a concern to staff. Given the current motor pool, there is not always a vehicle available to transport people off campus when additional health services are needed.

- The Financial Aid Office is located in its own building. Space is adequate.

- The Recreation/Athletic Department is based in the old and new (1983) gymnasia. Most facilities are in good condition but are in relatively short supply. At present, facilities consist only of several new basketball courts and a pool table. In addition, the olympic-sized indoor pool in the old gym has fallen into disrepair and has not been used for over a decade. Renovations and a new water pump/purification system are well beyond current budgetary limitations.

- The Four Winds Cultural Center is a place where students, faculty, staff, and members of the greater Bismarck community can meet to teach and learn traditional Indian arts, crafts, music, dance, and history. Located in one of the Ft. Lincoln buildings, the Center faces the problem of a lack of climate control, which is needed to preserve sensitive artifacts.

- The Transportation Department's vehicles provide shuttle transportation to the high school in Bismarck for UTTC students' children, make trips to Bismarck for evening shopping and recreational activities, carry members of athletic teams to events, and transport students, faculty, and staff to medical appointments, meetings, and field trips. The Department services all of its own vehicles. Its building is currently in need of minor repairs; its vehicles are mostly older models, subject to frequent break-downs. And vehicles are in short supply.

- The Cafeteria, located in its own building, is operating at capacity to serve 19 meals a week for students; two meals each week day for children in the elementary school, child care center, or nursery; and one to two meals a day for staff and faculty. Seating is insufficient at peak times. Increased enrollment would necessitate an addition to the existing building or a staggered dining schedule. An additional store room would enable staff to order in larger, more cost-efficient quantities than the current storage space allows.

Child Care Services and Elementary School Facilities

UTTC provides on-campus day care and K-8 education for its students' children. For infants and toddlers eight weeks to three years of age, a full-service nursery is available. The Child Care Center provides day care services for three- to six-year-olds. Each facility is licensed to care for 50 children. Formal education for students in kindergarten through eighth grade is provided by the 18 member staff of the Theodore Jamerson Elementary School. Ninety to 100 students have been enrolled each year. While the majority of these elementary students are children of UTTC students, a limited number are children of UTTC staff or children from the Bismarck/Mandan area.

The nursery is located on the main floor of Sakakawea Hall, one of the original campus buildings. Its 8,200 square feet of space include sleeping, play, food preparation, and dining areas. Laundry facilities are available in the building's basement, and a fenced-in porch offers an outside play area. The existing space serves its purpose, but conflicts with the need for quiet on the part of the students who are also housed in Sakakawea Hall. Students and children would benefit if the nursery were located in its own facility.

The 6,169-square-foot Child Development Center was built in 1978 with a Federal Economic Development Grant. Its modern, cheerful design includes play, instructional, food preparation, and dining areas on the first floor and a sleeping area in a second floor loft. An outdoor, fenced-in playground sits adjacent to the center. Although it is licensed to serve 50 students, the average daily attendance is approximately 35. One of the nicest facilities on campus, the center functions well and currently is operating slightly below capacity. Assuming that an additional 100 UTTC students would increase the number of children needing day care by one-third, the center would be operating right at capacity. The west end of the Center was designed to be extended when and if additional space is necessary.

The main classroom facility of the Theodore Jamerson Elementary School is a 6,700-square-foot steel building. A second, 1,500-square-foot mobile classroom unit sits adjacent to the main facility and houses the Chapter 1 program. An original brick structure (also 1,500 square feet) across the street is used for music classes and science labs. An older, wood-framed, 2,134-square-foot building is used for the kindergarten classes. While the Child Development Center and nursery are operating at or slightly below capacity, the elementary school is already above capacity.[24] The college has applied to the Aberdeen Regional Office of the BIA for construction of a fifth elementary school building, but such construction would not begin until at least 1995. This building would alleviate current crowding and allow the school to accommodate the children of an additional 100 vocational students.

In sum,[25] UTTC has a great many needs related to its facilities. One approach to these needs is to build several new facilities in addition to renovating some old facilities. A second approach is to renovate many of the older buildings. These two approaches are not mutually exclusive; however, adopting the construction approach would eliminate the need for some renovations. Below we discuss both approaches.

Two Approaches to Meeting UTTC's Facility Needs

Construction Approach

If UTTC were to take the construction approach, the buildings discussed below would need to be constructed. Cost estimates for construction were obtained by estimating units (square feet, beds) and multiplying these units by figures obtained from *Building Construction Cost Data, 50th Edition, 1992* by R.S. Means:

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[24] The school's current student-teacher ratio is 13.3:1.

[25] The sections that follow are paraphrased from a paper, "Construction and Renovation Estimates--UTTC," prepared for Pelavin Associates by the administration at UTTC.

- UTTC believes that it needs to build additional single-student housing in order to expand enrollment. One men's and one women's dormitory is needed. Each would hold 75 students. The cost for such housing is $17,700 per bed. The cost for 150 beds is thus $2,655,000.

- Twenty-four units of family housing are also needed. UTTC is currently building a 16-unit complex, and the cost is $565,000. Maintenance personnel at UTTC estimate that by the time new units would be built, the cost would have risen by at least 10 percent. Thus, a 24-unit complex would cost $932,250.

- A multi-purpose cultural center/classroom/office building could be constructed with a large center for cultural arts and three "pods" extending out from this area. This building could hold counseling offices, classrooms, administrative offices, cultural arts and the like. This multi-purpose center could eliminate the necessity for a number of the renovations discussed under the renovation approach. Very preliminary planning shows that the building would need to be approximately 40,000 square feet based on current square footage and expected expansion. Construction cost for this type of building is approximately $114.42 per square foot. Total cost is thus $4,576,800.

- A Student Union/Recreation Center is envisioned as part of expanded recreational facilities and is estimated to cost $1,139,400. The center would be constructed on top and east of the current swimming pool. The center would additionally house weight rooms, handball/squash courts, and other physical culture areas in a total of 9,000 square feet.

- Estimates from a local contractor indicate that a separate nursery facility would cost approximately $475,000.

- Administrators have requested an additional elementary school building of 6,000 square feet, estimated to cost $687,000.

- A 45 × 60 foot warehouse-type building for Transportation Department storage and vehicle repair is needed. At $30 per square foot, this structure would cost $81,000.

- UTTC needs a student mailroom with handicap access that would also house central supply and distribution offices. A 30 × 40 foot facility at $44 per square foot would cost $52,800.

In addition to actual building costs, sidewalks, landscaping, water lines, and sewerage would add approximately $500,000 to total construction costs. Exhibit II-5 summarizes the construction approach and its $10,599,250 of related costs.

Most repairs discussed below under the renovation approach also would need to take place under the construction approach. However, as discussed in greater detail in the companion volume to this report, implementation of the construction approach would eliminate the need for

EXHIBIT II-5

SUMMARY OF UTTC FACILITY NEEDS — CONSTRUCTION APPROACH

Function	Need	Cost Estimate
Housing		
Single-Student	One new men's and one new women's dorm	$2,655,000
Family	24 units of additional family housing	932,250
Multi-Purpose Center	Cultural center/classroom/office building	4,576,800
Student Services		
Recreation/Athletics	Student union/recreation area over current swimming pool	1,139,400
Child Care Services and Elementary School Facilities	Separate nursery facility	475,000
	Additional elementary school building	687,000
Miscellaneous	New transportation building for vehicle repairs	81,000
	Mailroom/supply and distribution center	52,800
TOTAL		**$10,599,250**

three major renovations, including: enlargement of current administrative offices, enlargement of four classrooms, and renovation of the Four Winds Cultural Center, together projected to cost $432,000.

Renovation Approach

The need for some renovations would be eliminated by the comprehensive construction program, as discussed above. We have described needed major renovations in five major areas: student housing, instructional facilities, faculty and administrative offices, student services, and child care services. In addition, we have described miscellaneous repairs needed for the original buildings. Exhibit II-6 summarizes these needs and their associated cost estimates of $2,184,030. In addition, the college has identified the need for repairs to streets, fire hydrants, fences, and electrical and sewer lines that support the institution's facilities; these also are summarized in Exhibit II-6 and represent additional costs of $503,000. They would need completing regardless of whether a construction or renovation approach was adopted.

Campus Training Equipment--Conditions, Capacities, & Needs

In an increasingly high-tech, rapidly changing world, state-of-the-art training equipment is crucial for vocational education and career placement.[26] Along with the basic facilities in which this equipment is used and the residences in which students spend their extra-curricular time, substandard training equipment "not only restrict[s] learning, but also make[s] a powerful statement of neglect."[27] Like many other Indian colleges, UTTC struggles to find funds for new

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[26] For the purposes of this assessment, "training" equipment refers to all equipment used in general education and vocational classes, and in support services that provide direct academic support (e.g., the library and computer center).

[27] Boyer, Ernest L. *Tribal Colleges: Shaping the Future of Native America.* Lawrenceville, NJ: Carnegie Foundation for the Advancement of Teaching/Princeton University Press, 1989, p. 73.

EXHIBIT II-6 (Cont.)

SUMMARY OF UTTC FACILITY NEEDS — RENOVATION APPROACH

FACILITY TYPE	FACILITY NEED	ESTIMATE
Four Winds Cultural Center	Renovate old cultural center and museum facilities by gutting the existing building and rebuilding to include facility for preservation and display of artifacts and works of art.	192,000
Cafeteria	Increase seating space in existing cafeteria.	110,000
	Create additional storage space.	27,200
	Expand dishwashing area.	9,000
Miscellaneous		
	Repair exterior and interior of other original campus buildings including:	
	— Roof shingling for 5 campus buildings	34,500
	— Furnaces for 9 campus buildings	36,000
	— Porch renovation for 10 campus buildings	100,000
	— Air conditioning compressor for Child Development Center	2,500
	— Siding, shingles, door, insulation for Chapel	7,500
Peripheral Repairs		
	Repair peripheral campus infrastructure including:	
	— Repair of street	150,000
	— Removal of 10 existing fire hydrants	3,000
	— Replacement of sidewalk for 1 building	10,000
	— Repair of electrical lines	50,000
	— Repair and maintenance of sewer lines	100,000
	— Purchase of sewer cleaning machine	175,000
TOTAL		**$2,184,030**

EXHIBIT II-6

SUMMARY OF UTTC FACILITY NEEDS — RENOVATION APPROACH

FACILITY TYPE	FACILITY NEED	ESTIMATE
Student Housing		
Student Housing		
— Single-Student Dormitories	Exterior repairs including roof shingling, porch renovation, and window and sidewalk replacement. Interior repairs including furnace replacement, bathroom renovation, ceiling repair, and furniture replacement.	$135,500
— Family Housing	Exterior repairs including water service line replacement, siding replacement, porch renovations, and roof shingling. Interior repairs and installations including new water heaters, clothes washers and dryers, stoves, and refrigerators for some units, and floor, furnace, and furniture replacement for some units.	437,330
Instructional Facilities		
	Renovate four classrooms to accommodate larger number of students (over 25).	40,000
Faculty/Administrative Offices		
	Renovate a room for fireproof storage of records.	5,000
	Improve ventilation and climate control for five original buildings by installing furnaces and central air conditioning.	122,000
	Move some administrative offices to another building and enlarge and renovate the offices that remain in the administration building to accommodate computers and other equipment.	200,000
Student Services		
Counseling Offices	Develop more private counseling offices for career counseling by building partition in the large office in the Placement Department.	2,500
	Arrange for greater privacy in offices of personal/social counselors by installing insulation and soundproof tiles in two counseling offices.	4,000
Library	Create additional seating space in library by constructing an archway between the existing library and the classroom directly north. Move classroom to one of those renovated above.	6,000
Athletics/Recreation	Renovate swimming pool.	500,000

equipment. The first-year installment of Perkins funding has allowed the college to make significant equipment purchases and repairs, but substantially more funding is needed if UTTC is to provide instruction on state-of-the-art equipment like that used in the field. Most of the college's equipment is functional, but much of it is second-hand, cast off from neighboring military installations and industrial facilities. For example, until recently the newest welder was 15 years old.

The UTTC administration provided Pelavin Associates with inventories of existing equipment and a detailed estimate of equipment needs. The list of needs is appended in full in Appendix 1. Exhibit II-7 below summarizes the more pressing equipment needs of each department or program that submitted projections and/or inventories.[28] Textbooks are not included in any of these estimates, nor were they included in the needs projections submitted for the report. The descriptions for each department indicate the largest needs in order of expense. Detailed descriptions including the number, type, and specific cost of each piece of equipment are presented in the appendix.

The weapons component of criminal justice, the library, the Business/Clerical Department, the Math Department, the support component of the Skill Center, and the Welding Department have the most expensive projected needs, with total purchase costs in excess of $28,000 each. Except for criminal justice, whose needs include a $65,000 indoor pistol range, these departments are projecting sizable expenses to purchase computers. Of the estimated $450,000 in total projected equipment needs, approximately half would go to vocational programs. The remainder would be divided between general education and academic support programs.

The UTTC faculty have clear plans for their programs and, in many cases, have active advisory committees. These committees include members of the Bismarck and Indian

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[28] Projections for English, licensed practical nursing, and early childhood education were not submitted.

EXHIBIT II-7

A COST SUMMARY OF UTTC'S EQUIPMENT NEEDS BY DEPARTMENT OR PROGRAM

Department or Program	Total Purchase Costs	Total Maintenance Costs	Equipment Descriptions--Major Items
Automotive	$13,112	$100	Wheel balancer and specialty tools
Business/Clerical	$65,479	$4,800	Computers, calculators, dictaphones, furniture
Carpentry	$0	$0	No needs submitted
Criminal Justice	$119,350	$2,150	Pistol range, radar, weapons, computer, typewriter, AV, exercise equipment
Disadvantaged	$10,834	$100	Test scanner, computer, furniture, AV
English/Disadvantaged	$13,799	$300	AV and furniture
Food Service Lab	$10,133 to $11,133	NA	Appliances, cabinets, fire emergency exit, floor tile
Library	$78,000	$5,000	Bookshelves, computer, security system, copier
Mathematics	$38,180 to 46,080	$1,410	Computers, Furniture, Graphics Calculator, AV
Personal Development	min $21,200	$1,000	Computers, AV, furniture, carpet, asbestos removal
Plumbing & Electrical	$2,000	$110	Specialty tools
Science	$17,960	$1,700	AV, computer, ice maker, and assorted lab equipment
Skill Center Student Support	$28,602		Computers, furniture, TV, VCR
Welding	$30,700	$2,250	Arc welders
TOTAL	$449,349 to $458,249	$15,635	

communities who are involved in the vocations taught at UTTC. They provide the instructors with advice about trends in their fields that will affect the instructors' ability to place their students. For example, automotive technology will soon receive national certification in four specialty areas. These areas were chosen because they are both growth areas in the field and areas where startup costs for training equipment are low. In criminal justice, the faculty hopes to purchase radar and a breathalyzer to prepare students for the technology used in modern law enforcement. All of the faculty's plans are predicated on the need to provide students with an education that is directly applicable and relevant to the economic and human resource needs of the Indian communities, state, and region.

Current Financial Picture of UTTC

Operating as a contractor under the 1975 Indian Self-Determination and Educational Assistance Act, UTTC receives the bulk of its operating funds as a line-item appropriation in the Employment Development budget of the Bureau of Indian Affairs (BIA). Over the last five years, this funding amount, which UTTC calls its "prime contract," has ranged from a high of $2,691,460 in 1988-89 to a low of $2,090,100 in 1987-88. In 1991-92, the college's prime contract funding amounts to $2,375,300, although as of February 1992, the administration had only received 75 percent of that amount, or $1,786,500.

This amount is subject to annual renewal, and in each of the past two years, the BIA has proposed cutting between $450,000 and $460,000 from UTTC's appropriation. UTTC President Gipp and Chairman of the Board Russell Hawkins testified before the U.S. House Appropriations Subcommittee for Interior and Related Agencies in each of those years in order to restore this funding, noting that the proposed funding cut would force the institution to close its doors.

The prime contract funds administrative and faculty salaries (48 percent); related fringe benefits and travel expenses (11 percent); campus operating and maintenance supplies, materials, equipment, and support services (11 percent); indirect costs (27 percent); office and computer supplies, materials, equipment, and services (1 percent); housing supplies, materials, and equipment (0.3 percent); and vocational supplies, materials, and equipment (2 percent). It does not fund students' tuition, room, and board costs. These funds are provided primarily through individual students' tribes under the BIA's Adult Vocational Training program. Depending on their financial and family status, students receive additional funding via Basic Educational Opportunity Grants (Pell grants), Supplementary Educational Opportunity Grants (SEOGs), College Work Study, the Jobs Training Partnership Act (JTPA) and Job Opportunities and Basic Skills (JOBS) programs, or the AFDC program. Occasionally, if a student's tribe and/or Federal grants or programs will not provide the necessary funding, UTTC will provide scholarships of up to $1,800 per student.

As illustrated in Exhibit II-8, which details each of UTTC's major funding sources, UTTC receives three additional grants from the BIA to operate the Theodore Jamerson Elementary School and its Chapter 1 Program, and pay elementary school staff salaries. This year, these three grants together amounted to $516,511, a substantial reduction from the three previous years. In 1990-91, UTTC received an additional one-time BIA appropriation of $104,000 to operate and administer an infant tracking program for four North Dakota Indian reservations. In 1991-92, the North Dakota state government provided UTTC with $39,000 to continue the infant tracking program.

Before 1991-92, the Indian Health Service (IHS) provided the second largest amount of funds for direct operation of UTTC programs. In 1991-92, UTTC's second largest funding amount ($778,360) came from the U.S. Department of Education under the Tribally Controlled Postsecondary Vocational Institution Program, provided for in the Carl Perkins Act. This is the first time UTTC has received this grant, and as summarized in Exhibit II-9, the Carl Perkins money has allowed UTTC to:

EXHIBIT II-8

UTTC'S MAJOR SOURCES OF FUNDING

Funding Sources	Annual Renewal	Major Use of Funds	Amount of Funds (Dollars)				
			1987-88	1988-89	1989-90	1990-91	1991-92
Bureau of Indian Affairs	10/1 - 9/30	Operate & administer UTTC program (prime contract)	$2,090,100	$2,691,460	$2,414,400	$2,375,300	$2,382,000
Bureau of Indian Affairs	10/1 - 9/30	Operate elem. school, Chapter 1 Program, & pay staff salaries	538,002	617,925	618,413	705,353	516,511
Bureau of Indian Affairs	10/1 - 11/11	Operate & administer infant tracking program	473,540	555,319	528,539	630,310	430,217
North Dakota Department of Public Instruction	11/12 - 2/5	Operate & administer infant tracking program					39,000
Indian Health Service	10/1 - 9/30	Operate UTTC dispensary & chemical dependency program	323,938	348,313	435,564	414,726	459,650
Department of Education	7/1 - 6/30	Operate Title IV Part A program for the elementary school	10,727				
Department of Education	7/1 - 6/30	Operate Title IV Formula Grant Program for the elementary school		10,104	11,522	11,471	14,080
Department of Education	7/1 - 6/30	Operate Writing to Read Program for the elementary school	32,735				
Department of Education	9/1 - 8/31	Operate special services for disadvantaged students program	70,745	73,221	82,382	100,000	119,584
Department of Education	2/1 - 1/31	Administer & operate Resource & Evaluation Center	449,525	448,444	467,846	412,880	437,067
Department of Education	10/1 - 9/30	Administer & operate Title III Strengthening Institutions Program			174,216	112,580	60,561
Department of Education	6/1 - 5/31	Operate Tribally Controlled Postsecondary Vocational Institutions Program					778,360
Minority Business Dev. Agency	8/1 - 7/31	Operate & administer the N.D. Business Development Center	100,000	100,000	105,840	105,840	105,840
Department of Labor	7/1 - 6/30	Operate & administer Job Training Partnership Program for UTTC	204,757	169,723	167,685	165,403	169,471

EXHIBIT II-8

MAJOR SOURCES OF FUNDING (Cont.)

Funding Sources	Annual Renewal	Major Use of Funds	Amount of Funds (Dollars)				
			1987-88	1988-89	1989-90	1990-91	1991-92
North Dakota State Board for Vocational Education	7/1 - 6/30	Fund instructional programs and support services	89,835	80,810	68,975	73,618	176,008
Northwest Foundation	9/25 - 10/1	Operate Guild of Native American Artists Program					33,670
Montana State University	8/1 - 2/29	Operate Assist Program					13,920
US West Foundation	7/1 - 6/30	Operate US WEST Grant					25,000
Bush Foundation	7/1 - 6/30	Operate Faculty Development Planning Grant					9,799
Economic Development Adm.	8/9 - 8/10	Fund construction of a 16-unit student residence					560,000
TOTAL			$4,383,904	$5,095,319	$5,075,382	$5,107,481	$5,900,520

EXHIBIT II-9

UTTC
STATEMENT OF EXPENDITURES, ENCUMBRANCES, & APPROPRIATIONS TRIBALLY CONTROLLED POSTSECONDARY VOCATIONAL PROGRAM*

	Appropriations (Revised)	Month-to-Date Expenditures	Year-to-Date Expenditures	Outstanding Encumbrances	Unencumbered Balance	Expended & Encumbered %
Salaries--Instructors, counselors, office personnel	$290,070	$21,822	$88,576		$201,494	30.53
Fringe benefits @ 26%	75,420	3,153	10,849		$64,571	14.38
Travel--Admissions, Placement, and Counseling Departments	16,875		596		16,279	3.53
Equipment--computer, office, training, and student housing	199,145	9,442	58,872	$105,447	34,826	82.51
Supplies--Maintenance, office, cafeteria, instructional, and printing/reproduction	123,845	7,623	45,271	20,628	57,946	53.21
Professional development	7,600		1,664		5,936	21.90
Other center projects	22,500			14,785	7,715	65.71
Indirect costs at 8%	42,905		4,297		38,608	10.01
TOTALS	**$778,360**	**$42,041**	**$210,125**	**$140,861**	**$427,374**	**45.09**

* Due to rounding, numbers may not add precisely.

- Hire additional clerical staff, counselors, and general education instructors;
- Purchase computer and other office and instructional equipment;
- Purchase furniture for student housing;
- Purchase office, maintenance, cafeteria, and instructional supplies;
- Provide travel allocations for its admissions, placement, and counseling staff;
- Provide professional development for its staff;
- Remodel a conference center and renovate some student housing; and
- Hire a science instructor and consolidate all science classes on campus.[29]

As depicted in Exhibit II-9, UTTC received four other grants in 1991-92 from the Department of Education. Three of these grants, however, are pass-through programs that do not directly benefit the institution. These three grants include:

- $14,080 to administer and operate the Title V formula grant for the Theodore Jamerson Elementary School;
- $437,067 to administer and operate an Indian Technical Assistance Center for a seven-state region; and
- $60,561 to administer and operate the Title III Strengthening Institutions Program, providing computers for administrative offices.

The fourth grant allows UTTC to provide remedial assistance in basic skills for its own disadvantaged student population, under the Department's "TRIO" programs of Disadvantaged Special Services, Upward Bound, and Talent Search.

UTTC currently receives five grants (summarized under one heading in Exhibit II-9) from the North Dakota State Board for Vocational Education. Two of these together provide $117,438 for operation of the vocational instructional programs as well as $20,135 for individualized assistance to disadvantaged students, $14,435 for the child care program, and

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[29] Previously, students were sent to Bismarck State College (BSC) for science electives. With in-house science instruction, UTTC is able to recoup tuition revenue lost to BSC in the past.

$24,000 for single-parent support. In total, these five grants and the aforementioned grant from the state of North Dakota to run the infant tracking program represent $215,010 in funding from the state government this year, or four percent of UTTC's total budget of $5,900,520 this year.

In total, the college received $1.3 million in indirect cost allocations for all the contracts it administered in 1991-92. These funds are used to support the institution's infrastructure and administration. Due to insufficient indirect cost returns, however, UTTC administrators say that the institution loses money on U.S. Department of Education, Minority Business Development, and North Dakota state programs. For example, the Department of Education has only authorized an indirect cost rate of eight percent in recent years; significantly less than the overall negotiated rate for Federal contracts.[30] While the college does derive some benefit from the pass-through program funds it administers, this benefit rarely outweighs the overhead costs.

The Indian Health Service provided UTTC with $459,650 in 1991-92 to operate the institution's health care center and chemical dependency program. UTTC also receives $105,840 annually from the Federal Minority Business Development Agency to operate and administer the North Dakota Business Development Center, another pass-through contract that provides little direct benefit to the college. The Department of Labor also provides $169,471 to operate and administer the Job Training and Partnership Act (JTPA) program on campus. This program serves American Indian students state-wide, including some UTTC students.

In 1991-92, UTTC obtained a number of one-time grants from private sources for program improvement and computer procurement. These grants were from the:

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[30] The indirect cost allocation for UTTC's BIA prime contract consists of the weighted average of all other indirect cost rates for contracts currently administered by the college. Thus, the indirect cost allocation for the prime contract varies from year to year and is reduced when the college receives relatively low indirect cost allocations for other contracts. This year, the indirect cost rate for the prime contract is 19 percent.

- Northwest Foundation to operate the Guild of Native American Artists Program;[31]
- Montana State University to operate the Assist Program;[32]
- U.S. West Foundation to purchase computers for the college's computer center; and
- The Bush Foundation to help the faculty improve their curricula.

The only recent support for capital improvements has come from the Federal Economic Development Administration (EDA). This April, a $560,000 grant will allow the college to begin construction of the new 16-unit family housing complex.

Other sources of income for UTTC include a modest endowment of $40,350 established in 1982[33] to decrease long-term dependency on its Federal appropriations and very minimal revenues from campus services used occasionally by the outside community.[34]

Finally, UTTC receives monies in the form of student financial assistance. As noted earlier, UTTC provides full funding for tuition, room, board, and fees for all of its American Indian students. Exhibit II-10 details the sources of these scholarship dollars; the great bulk are paid by the BIA (although the BIA's share has fallen steadily from 58 percent in 1987-88 to 44 percent in 1991-92) and by the Pell Grant program (roughly 30 percent each year). Other sources of scholarship aid include Job Training Partnership Act (JTPA) contracts, the College Work Study Program (CWSP), the Student Educational Opportunity Grant (SEOG) program, and

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[31] This is a non-academic, pass-through to develop a free marketing service for American Indian artists.

[32] This program is designed to increase the number of American Indians in science and technology occupations. Grant money this year was used to purchase three computers for the elementary school and one computer for the medical records vocational program.

[33] *Self-Study*, p. 147.

[34] These services include the cafeteria, Child Development Center, print shop, kindergarten, facility rentals, recreational events, and Four Winds Cultural Center art sales. In addition, a few non-Indians are accepted into the LPN program each year as space is available; they pay full tuition for their education.

EXHIBIT II-10

UTTC STUDENT TUITION AND FEES

Student Tuition and Fees Funding Source	**Amount of Funds (Dollars)**				
	1987-88	**1988-89**	**1989-90**	**1990-91**	**1991-92**
Pell Grant	$238,045	$210,341	$237,086	$260,599	$352,658
Tribal Scholarships					
JTPA Contracts[1]	56,132	54,239	54,447	43,626	60,633
BIA Assistance[2]	465,642	395,182	383,880	431,340	458,491
American Indian College Fund					20,000
College Work Study Program (CWSP)	20,967	31,507	34,287	33,588	38,804
Study Educational Opportunity Grant (SEOG)	23,461	60,998	60,745	61,429	118,693
TOTAL	**$804,247**	**$752,267**	**$770,445**	**$830,582**	**$1,049,279**

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[1] These funds constitute part of the JTPA monies from the U.S. Department of Labor itemized in Exhibit II-8.

[2] This assistance from the BIA is in *addition* to the three BIA funds outlined in Exhibit II-8 and is made available through students' individual tribes.

for the first time this year, the American Indian College Fund. Exhibit II-11 displays the number of Pell grants students receive; between 69 and 90 percent of students have been fully funded by the Pell program in the last five years.

In summary, the college is faced with four primary financial problems: (1) a lack of collateral prohibits leasing and loans; (2) a lack of funds for facility renovations and repairs confounds efforts to maintain the campus infrastructure; (3) below-normal indirect cost returns force the college to use its prime contract to support other programs' overhead costs; and (4) a lack of housing prevents the college from enrolling students to its full instructional capacity and, thus, reduces tuition revenues.

Conclusion

UTTC seeks to provide a quality vocational-technical education to the unique population of American Indian students it serves. Ninety-eight percent of its students come from economically and academically disadvantaged backgrounds. Forty percent of its students have never lived outside of their reservations, and 47 percent are parents. The college's mission is to educate these students for self-sustaining employment in occupations with maximum job placement potential in the state, region, and Indian communities from which students are drawn. Because of its students' characteristics and needs, it must provide this education in a residential setting that offers a variety of critical support services, such as child care, counseling, and medical care. In addition, the college would like to expand from its current annual enrollment of 284 to 400 students to maximize its instructional capacity.

To meet its objectives, UTTC must remedy certain needs in the areas of housing, facilities, and training equipment. These include:

- Major repairs and renovations to much of the campus' existing facilities, fast approaching a century in continuous use. Roofs and windows are in most pressing

EXHIBIT II-11

UTTC STUDENT PELL GRANTS

Category	1987-88	1988-89	1989-90	1990-91	1991-92
Total Enrollment	207	232	229	244	284
No. of students receiving full Pell grants	187	159	164	177	233
No. of students receiving partial Pell grants	0	0	0	0	0
Percentage of all students receiving Pell funding	90	69	72	73	82

need of repair to prevent heat loss and further deterioration of supporting brick walls. Substantial interior repairs are also needed to make dormitories for single students more habitable;

- Additional construction of new family housing, single-student dormitories, multi-purpose classroom and office space, child care facilities, and a student union; and
- More state-of-the-art training equipment that reflects current practice in the occupational areas for which UTTC is preparing its students. Perkins funding in FY 91 allowed the college to purchase some new equipment, but additional needs exist. These needs will hopefully be met with future Perkins funding allocations.

The college is currently faced with four primary financial problems that prevent it from meeting its infrastructure and equipment needs with its current budget:

- The BIA--its major source of funding--does not allow its appropriations to be spent on major renovation and construction;
- The college has had difficulty finding other sources of public or private funding that will support major capital improvements;
- Below normal indirect cost returns from contracts from several Federal and state agencies force the college to use its BIA monies to support these contracts' overhead instead of to buy new equipment or make minor facility repairs; and
- A lack of collateral prohibits the college from leasing facilities or securing loans for capital improvement.

In addition, UTTC is plagued by an inability to perform long-term budgeting or planning, since virtually all of its operating appropriations are subject to annual renewal. In recent years, the administration has had to fight regular battles to ensure that the amount of its BIA prime contract is not reduced.

Clearly, not all of UTTC's infrastructure and training equipment needs are so critical as to immediately threaten the institution's survival; many of its needs could indeed be prioritized over a five-year period. However, the institution requires substantial additional funding in the near future in order to meet its objectives of providing a first-rate vocational-technical education to an often disadvantaged--and historically neglected--population of American Indian students.

CHAPTER 3

FACILITY AND EQUIPMENT NEEDS OF CROWNPOINT INSTITUTE OF TECHNOLOGY

Introduction

In this chapter, we provide a description of the current program and needs of Crownpoint Institute of Technology (CIT), discussing the mission and philosophy of the college, the characteristics of the student body, the capacity and condition of campus facilities and equipment, the needs for additional facilities and equipment if CIT is to meet its objectives, and the current financial picture of the school.

Overview

The Crownpoint Institute of Technology (CIT) is a vocational-technical college currently serving approximately 150 day students in 12 vocational specialties, a rotating group of about 110 students per year in adult basic education/general educational development courses and about 215 evening students each semester in continuing education courses. The school was conceived in 1975 as a skills development center for the Navajo tribe. Its current facilities were dedicated in 1979 with programs subcontracted through the Navajo Division of Employment and Training. It became a private corporation in 1982, was recognized by the U.S. Department of Education as an institution of higher education in 1985, adopted its current title in 1985, and received full accreditation as a postsecondary vocational-technical college in 1987.

CIT is located in the town of Crownpoint, New Mexico, where the population is approximately 2,000. The land in the town is owned by the Navajo tribe; the land on which the school is situated was donated by the tribe. The only housing available for students and faculty is that provided by the school; there are no rental homes or apartments in the vicinity, and the waiting lists for Bureau of Indian Affairs (BIA) houses are long. The nearest towns of any size (Gallup and Grants) are over 60 miles away, and commuting to the school from most of the surrounding rural area is difficult since few roads are paved.

The faculty and staff at CIT began a strategic planning exercise with a retreat in April 1990, which has resulted in clear goals for the school and a strategy for achieving them. They prepared a Campus Master Plan in June 1991, with the assistance of Leedshill-Herkenhoff, Inc., an architectural firm in Albuquerque, NM. The Master Plan summarizes the college's programmatic goals and facilities needs, sets priorities for building construction and improvement, and provides drawings of proposed facilities and estimates of the costs of constructing them. The results of the strategic planning process and the Campus Master Plan have been used extensively in preparing this chapter.

Mission and Objectives

As stated in its 1991 application for funding under the Tribally Controlled Postsecondary Vocational Institutions Program, the mission of CIT is "to provide high quality and relevant vocational and technical programs and services, continuing education services and economic development services, primarily for the people of the Navajo nation."[36] To achieve its mission, CIT subscribes to the philosophy that "the lives of individuals are valuable; that education is a means to social well-being and economic self-sufficiency; and that vocational education is a means to help people help themselves."[37] To achieve its mission and follow its philosophy, CIT believes it is necessary:

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[36] Crownpoint Institute of Technology, *Tribally Controlled Postsecondary Vocational Institutions Program Proposal*, Presented to the U.S. Department of Education, May 14, 1991, page 3.

[37] *Ibid.*, p. 3.

- "To challenge and assist its students in growing and becoming competitive in the national job market;
- To instill success through a disciplined approach to adult education in a learning environment that is structured, stimulating, supportive and friendly; and
- For students and staff to share alike in making this competitive and supportive environment possible and successful."[38]

In addition, Navajo cultural values are incorporated into all instructional and administrative activities.

The college is governed by a five-member Board of Directors, appointed by the President of the Navajo Nation and confirmed by its Council. Each member of the board represents one of the following sectors: business, labor, education, industry, and tribal government. The board meets monthly at the college to assist in all aspects of decision-making regarding the institution and its programs. In part it is the board's responsibility to see that the values of the Navajo tribe are reflected in the goals and activities of the college.

CIT has been accredited by the North Central Association of Colleges and Schools, the group providing accreditation to postsecondary vocational and technical institutions in the Midwest. The school offers one-year courses leading to certificates in the following 11 majors, grouped within CIT's divisions:

- Office/Computer (Applied Computer Technology, Accounting, Secretarial Science);
- Animal and Range Science (Livestock/Range Management);
- Transportation Technology (Heavy Equipment and Diesel Mechanics);
- Construction Trades and Technology (Air Conditioning, Heating and Refrigeration; Building Maintenance; Carpentry; Electrical Trades; Surveying); and
- Food Services (Culinary Arts).

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[38] *Ibid.*, p. 4.

In 1991-92, the school also offers a one-semester nursing assistant course in a new Health and Care Occupations division. The academic course work in this specialty is followed by a six-week supervised internship.

Students attend classes for 40 hours a week for two semesters or 32 weeks. In each week 25 hours are spent in the vocational major; 5 hours in mathematics; 5 in communication skills; 2.5 in job search and consumer education; and 2.5 in an elective. Because certification requires only the 25 hours in the major, each individual student represents 1.6 full time equivalents.

In January of 1992, approximately 150 students were enrolled in CIT's vocational and technical programs; by 1995, the institution would like to enroll 600 students and to achieve "technical college" status, that is, to expand its current one-year offerings to two years and offer credits that can be transferred to other institutions of higher education.

In addition to serving more students, the college would like to expand the program areas in which certificates or degrees are awarded. The chancellor's and president's goals for the next five years include the addition of the following new programs:

In 1992-93:	Architectural Engineering/Drafting Bakery Legal Assistant (Secretary)
In 1993-94:	Licensed Practical Nurse Small Business Management Veterinary Technician
In 1994-95:	Masonry Pipefitting and Plumbing Restaurant Management
In 1995-96:	Criminal Justice Dental Technician Fire Science Sportscraft/Small Engine Mechanics

They have carefully examined employment projections from the states of Arizona and New Mexico, the economic development plan of the Navajo Nation, and employment projections from other agencies (e.g., Navajo Area Indian Health Service) in creating these goals. As needs for employees become clear, they will respond with appropriate training programs. Also under consideration for future expansion of the curriculum are the areas of auto diagnostics, auto collision and bodywork, elder care/day care, forestry, instrument and control technology, laser technology, medical technology, and welding.

Student Characteristics

Exhibit III-1 displays enrollment information about CIT students. In the five-year period between 1987-88 and 1991-92, the total enrollment has varied from 125 (in 1990-91) to 221 (in 1988-89)--when the school offered a summer course to veterans in carpentry. Five of the academic divisions have been in operation throughout this period; the new Health Care Division began to offer training for nursing assistants in the fall of 1991. The highest enrollments have been in the Office/Computer and Construction Trades Divisions. All students attend full time in the regular program; the veterans carpentry program (in 1988-89) was part time.

Virtually all students who attend CIT are members of the Navajo tribe; their state of residence prior to attending CIT was either Arizona, New Mexico, or Utah. Historically, the majority of students were older than the traditional age range of college students (16 to 25). In 1987-88, 67 percent of the students were over 25 (94 of 140) and in 1988-89, 61 percent (134 of 221). But in the years since then, less than 50 percent of students have been in this older age range (44 percent in 1989-90, 49 percent in 1990-91, and 43 percent in 1991-92). About three-quarters of the students in each of the last five years have been single; about 40 percent have had children. About 70 percent of the students have chosen to live on campus. All students at CIT are fully funded, since none can afford to pay any part of their tuition, room and board, or fees.

EXHIBIT III-1

CIT ANNUAL STUDENT ENROLLMENT[1]

Category	1987-88		1988-89		1989-90		1990-91		1991-92	
	M	F	M	F	M	F	M	F	M	F
Total enrollment	84	56	176	45	99	51	82	43	101	86
Vocational area										
Office/Computer	3	39	4	31	3	39	6	31	10	44
Health Care	-	-	-	-	-	-	-	-	0	29
Animal & Range Science	7	0	5	1	5	3	4	3	7	3
Transportation Technology	12	0	17	1	21	0	13	0	14	0
Construction Trades	57	4	71	0	64	1	56	4	66	0
Food Services	5	13	5	12	6	8	3	5	4	10
Other: Veteran's Carpentry	-	-	74	-	-	-	-	-	-	-
Full time vs. part time										
Full time, degree-seeking	-	-	-	-	-	-	-	-	-	-
Full time, non-degree-seeking	84	56	102	45	99	51	82	43	101	86
Part time, degree seeking	-	-	-	-	-	-	-	-	-	-
Part time, non-degree-seeking	-	-	74	-	-	-	-	-	-	-
Tribal affiliation										
Navajo	84	56	176	45	99	51	81	42	98	86
Other	-	-	-	-	-	-	1	1	3	-

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[1] Source: CIT Registrar, January 1992.

EXHIBIT III-1

CIT ANNUAL STUDENT ENROLLMENT (Cont'd.)

Category	1987-88		1988-89		1989-90		1990-91		1991-92	
	M	F	M	F	M	F	M	F	M	F
State of residence prior to enrollment										
New Mexico	44	30	70	35	47	31	49	30	44	65
Arizona	39	26	105	10	52	20	33	12	54	21
Utah	1	-	1	-	-	-	-	1	3	0
Age brackets										
16-25	28	18	69	18	57	27	44	20	61	46
26-30	27	20	49	12	14	17	13	12	17	18
31-35	15	8	23	7	9	4	12	1	9	13
36-40	6	4	11	1	6	2	9	5	7	3
>40	8	6	24	7	13	1	4	5	7	6
Marital Status										
Married	17	12	37	9	14	20	19	6	20	16
Single	66	40	133	29	79	27	54	31	78	62
Separated/Divorced/Widowed	1	4	6	7	6	4	9	6	3	8
Number of students with dependent children	25	29	57	28	21	31	26	17	31	49

EXHIBIT III-1

CIT ANNUAL STUDENT ENROLLMENT (Cont'd.)

Category	**1987-88**		**1988-89**		**1989-90**		**1990-91**		**1991-92**	
	M	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**
Living										
On-campus[2]	61	41	106	31	86	22	63	14	80	43
Off-campus (within 30 mi.)	23	14	14	14	13	29	19	29	19	43
Off-campus (more than 30 mi.)	-	1	56	-	-	-	-	-	2	-
Number of students receiving diploma[3]	62	35	76	38	80	41	65	50	64	58

[2] In 1988-89, the total number of students living on-campus (147) appears to exceed the dormitory space of 110. However, the veteran's carpentry program occurred during the summer; so this number includes both winter and summer dormitory occupants. In 1991-92 and subsequent years, the number will exceed 110 because the nurse assistant program is only one semester in length; new students--living on-campus--replace students who have finished the program.

[3] Students in the veteran's carpentry program are not included in this row.

A relatively high percentage of the students who have entered a CIT program in the last few years have completed the program, and the number has grown in all but the last year. In 1987-88, 69 percent of students received their certificates; in 1988-89, the number grew to 78 percent; in 1989-90, to 81 percent; in 1990-91, to 92 percent; but in 1991-92, it was 65 percent. Of these students, a majority are placed in jobs soon after graduation. Exhibit III-2 provides employment placement information for the last five years.

Campus Facilities--Conditions, Capacities, and Needs

CIT occupies a 70-acre site at the edge of the town of Crownpoint, NM. The land is high desert and hilly; the buildings are constructed on a "wash," where water drains from surrounding hills. The soil is "collapsible," meaning that it expands when rain falls and contracts substantially as it dries. This feature, in addition to the natural drainage problems created by being on a wash, has led to considerable facilities problems.

CIT's six main buildings were all constructed in 1979, using funds from the Economic Development Administration. As shown on Exhibit III-3, they consist of:

- A large training and administration building, housing all administrative offices, most classrooms, and the training bays for most of the vocational programs;
- A support building, containing the multipurpose room (a small gymnasium), the kitchen and cafeteria, the library, and the classroom and lab space for the new nursing assistant program;
- A dormitory with 55 double rooms, used by males and females; and
- Three buildings, each with six apartments for faculty and/or staff.

All are constructed of the same materials and in a similar western architectural style that blends well with the land.

Unfortunately, the rains over the last few years have played havoc with the foundation of the training and administration building. To accommodate the soil type, the builders used

EXHIBIT III-2

CIT EMPLOYMENT PLACEMENT RATES[1]

Category	1987-88	1988-89	1989-90	1990-91	1991-92
Number of students receiving diploma[2]	97	114	121	115	122
Number of students finding full time employment,[3] among those who complete their degree	50	68	67	46	N.A.
Number of students finding part time employment,[3] among those who complete their degree	0	0	0	12	N.A.
Full time placement rate (%)	52	60	55	40	N.A.
Part time placement rate (%)	0	0	0	10	N.A.
Total placement rate (%)	52	60	55	50	N.A.

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[1] Source: CIT Registrar, August 1992.

[2] Students in the veteran's carpentry program are not included in this row.

[3] Within one year of graduation.

87

EXHIBIT III-3

INVENTORY OF CIT FACILITIES[1]

Name	Primary Purpose/Function	Other Purpose(s)/ Functions(s)	Construction Date	Anticipated Year of Next Major Renovation	GSF	Current $ Value	Average Annual Costs	Other Average Annual Maintenance Costs[2]
Training & Admin. Building[3]	Staff offices, classrooms, training bays		1979	In fall 1992 will be razed	42,200	$4,412,000	$74,302	$36,634
Support Building[3]	Gym, library, cafeteria, nurse assistant program.		1979		8,975	$1,192,600	$21,886	
Dormitory[3]	Housing for 110 students	Before- and after-school care	1979		17,130	$4,877,000	$8,730	
Faculty/Staff Apts.[3] (3 buildings)	Housing for faculty and staff		1979		9,600	$1,866,000	$12,369	
Day Care Center "Baby Barn"	Infant, toddler, and preschool child care		1988		1,710	$34,784	$4,357	
Trailer	Office for day care staff		1989		938	$11,500	$809	

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[1] Source: CIT's financial officer, January 1992.

[2] Most maintenance is done by CIT employees as part of their job; expenses listed here are those above and beyond the salaries of staff.

[3] These buildings are owned by the Navajo Nation and were built through Economic Development Administration funds.

concrete pillars to support all weight-bearing walls; pillars extend through the 35 feet of soil to bedrock. However, between weight-bearing walls, the builders poured concrete floors--without the support of additional pillars. In the vocational training bays and classrooms, the floor space is quite extensive. Over the last few years the soil has dropped as much as 10 inches; in the next few years, experts have estimated the soil could drop another two feet. The building's floors have cracked, toilets have separated from their pipes, doorframes have moved out of alignment, and as a result, a substantial part of the building is unusable. The cost of repairs is so high (about $3.2 million) that the staff (on the advice of the Economic Development Administration) has decided to raze the building (in the fall of 1992) instead of attempt further repairs. Twelve modular buildings will be erected to house some offices and instructional programs; at least four trades will have to move off-campus.

The dormitory has experienced some of the same problems as the training and administration building. However, it has been possible to repair the damage, largely because the facility has smaller rooms and, therefore, less floor space between concrete supports. Those rooms with collapsing floors have been amenable to a change in flooring material and construction; additional supports have been provided to ensure that further soil movement will not negatively affect the coherence of the structure.

The support building and the faculty and staff apartments have not faced the difficulties of the other two buildings; minor repairs have handled the problems of moving soil.

The other two buildings on campus, the day care center and the trailer that serves as the office for the day care center's director and the entrepreneurship program's director, have been recently renovated or furnished to serve their present purposes.

In sum, the college faces a critical need in the next few years--to replace its training and administrative facilities (see Exhibit III-4). Given that its goal over the next five years is to

EXHIBIT III-4

SUMMARY OF CIT FACILITY NEEDS

Function	Needs
Administration	New building
Instructional Facilities	New building(s) housing trades and technology programs Separate on-campus facility for animal and range science
Housing	
— Single students	New dormitory
— Students with families	New apartments
— Faculty and staff	Additional apartments
Child Care	Expansion of current facility for preschool children including space for the before/after school program for older children — or — Moving all child care to a larger building
Student Services	
— Recreation/Athletics	New gymnasium, swimming pool, athletic fields
	Expansion of support building to include a Student Union
— Library	Expansion of space in support building
— Cafeteria	Expansion of seating space
— Maintenance	New maintenance headquarters
	Storage facilities

expand its student population significantly, its staff desire not only to replace the existing facility but to expand their current facilities to serve a larger number of students.

Institutional staff and faculty recognize two barriers (which have implications for facilities) to achieving their goal of expanding the school's enrollment to 600 by 1995: difficulties in student access to the program; and needs for expansion of instructional and support services.

Student Access

The difficulties in access are of two types: those due to a limitation in housing near the campus, especially for students with families; and those related to the lack of child care in the local area.

Housing

The current on-campus dormitory has 55 double rooms, so that it serves a maximum of 110--generally single--students. Because there is no local rental housing and no on-campus housing for families, the number of available rooms in the dormitory limits overall student enrollment and excludes most students with families (all those wanting to live with their spouses and/or children). In 1991-92, 81 prospective students were denied admission to CIT after being placed on a waiting list; in the previous four years, between 17 and 43 students were wait-listed and denied admission. At present about 70 percent of students live on campus. Significant expansion of enrollment can only occur with the addition of more on-campus housing.

Leedshill-Herkenhoff, Inc., using an eventual enrollment of 950 students and an estimate of 70 percent living on campus, propose that 270 new rooms be added for single students, with associated commons area, bathrooms, laundry rooms, office, etc. In addition, they propose to construct 10 apartments for students with families.

Child Care

The only child care facility within 50 miles of Crownpoint that offers full-day care for preschool children is the "Baby Barn" on campus.[38] [The name reflects the fact that the facility used to be the classroom and laboratory for the Livestock Management program.] It is licensed to serve seven infants and 27 older children in its two-room structure. Children of students are given preference, followed by the children of staff, and then children from the community. The center operates as a drop-off facility, allowing parents to leave children on a given day, but not expecting a stable group of children to attend over time.

During the 1990-91 school year, for example, the director reported that 575 different children were enrolled for at least one day. About 150 were "enrolled" at the time of our site visit. However, the number of children in attendance on any given day usually does not exceed their licensed capacity. The large number does indicate that (1) there is a high need for child care services in the community; (2) children's attendance is sporadic and irregular; and (3) center staff cannot provide continuity in their programming for children.

The director believes that expansion of student enrollment would extend the need for child care services considerably. Students with children now live off campus and have the option of leaving children with relatives for the day. If these students lived on campus, they would need daily child care. Depending on the number of students with children, the need could easily exceed current capacity for service. On the negative side, the extended need for services by students would mean that the drop-off service provided to the children of commuters and college faculty and staff would have to be curtailed. On the positive side, center staff could count on a more stable group of children and plan a program for them that had continuity.

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[38] The local Head Start center offers a part-time program for preschool-age children, which operates from 9 a.m. to 2 p.m. Monday through Thursday. But unless the Head Start center receives funding to expand its hours, the CIT center will remain the only local facility caring for young children in the late afternoons and on Fridays.

In addition to the program for preschool children, the center operates an after-school program for elementary school children. At the present time it is conducted in the dormitory's common room and has little equipment. Staff try to help children with homework and allow them to watch television, but even these limited activities are sometimes problematic. This common room is the only place for college students to come to relax and watch television, and they may not choose to watch cartoons or children's videos. The staff would like to have a facility tailored for the after-school needs of children.

Instructional and Support Services

Although 12 modular buildings will be erected to replace the existing administration and training building, they will be temporary structures and will not serve the needs of all current programs--let alone the needs of an expanded student population. The buildings are essentially large rooms, suitable as classrooms but not as training bays for the trades. Eventually the college needs to replace the modular structures with permanent instructional facilities designed for the vocations in which training is now offered or will be offered in the foreseeable future.

Also housed in a modular building will be the staff in charge of most student support services (housing, placement services, financial aid, counseling, admissions and registration). As the administrative unit moves to a new facility, it is expected that these individuals will also move.

The one support service not included in this group is recreation. There is currently no student union on campus, and the possibilities for evening activities are extremely limited. The multipurpose room (with its one basketball hoop) in the support building often houses meetings; it is not equipped as a student meeting place or an athletic facility. The common area in the dormitory has one television and one pool table; it is insufficient for even the present 110 students. The students we interviewed felt a strong need for recreational facilities (i.e., a gymnasium, handball courts, weight room, and swimming pool), in addition to a meeting place.

The present support building is also limited in that the library and cafeteria are relatively small. The library has about 4,000 volumes (and another 1,500 on order) and is nearing capacity; the cafeteria has already staggered its lunch schedule to serve the current demands of students, faculty, and staff. Renovations to the building could allow for an enlarged library and cafeteria, as well as a student union and, perhaps, a day care facility.

Leedshill-Herkenhoff also outlined three facilities needs that would extend the ability of the college to serve its constituents well:

- Construction of a new animal and range science facility, containing classrooms and a laboratory;
- Construction of additional faculty and staff housing, to respond to the needs of the increased number of faculty members corresponding to the increase in number of programs and students enrolled; and
- Construction of a warehouse facility that would also house maintenance staff and equipment.

Training Equipment--Conditions, Capacities, and Needs

The training equipment currently in use at CIT is generally in good condition and meets the minimal needs of the programs. Funds from the Tribally Controlled Postsecondary Vocational Institutions Program have been very useful in the 1991-92 school year in upgrading equipment. One of the greatest needs cited by CIT in its application for these funds was the need for additional computers. This need was cited for use in instructional programs (e.g., equipment for the applied computer technology program), academic procedures (i.e., developing curricula, reporting student data, evaluating instructional program effectiveness), and administrative processes (i.e., creating a management information system for record-keeping by staff in student services, financial services, and instructional programs). A mini-computer had been ordered at the time of our visit to CIT in January 1992; the design of the management information system was underway.

Interviews with administrators, faculty, and students showed that there are still needs for training equipment. Exhibit III-5 summarizes the "wish-lists" of faculty for new equipment for their instructional programs. Appendix 2 contains the full lists. Many of the expensive items on the list (with a unit cost over $1,000) are computers or word processors: for surveying technology, applied computer technology, secretarial services, heavy equipment mechanics, electrical trades, communication, and mathematics. There is a strong feeling at the college that state-of-the-art training in vocational fields demands the development of competence in the use of computers.

The plans for expansion of enrollment levels and instructional programs will also create a demand for new equipment. Initially, expansion of enrollment within existing programs can be done by offering labs two times a day with half of the students using the equipment in the morning, half in the afternoon. To finance the beginning of a new instructional program, college staff work to find special outside funding. For example, to equip the nursing assistant program opened in September 1991, staff negotiated with the New Mexico Department of Labor for a $75,000 grant. This has allowed them to purchase required equipment, which can be added to over time through the use of other college funds.

Because CIT is expecting a continuation of funding under the Tribally Controlled Postsecondary Vocational Institutions Program, its staff do not believe that the need for additional funding for training equipment is as critical as the need for funding for construction. There are certainly problems in meeting the demands for new equipment: it is time-consuming to find the funding for new programs; many of the requests for special equipment on the wish-lists are expensive (e.g., a tractor and plow for livestock and range management; new diesel engines for heavy equipment mechanics; new ovens, hood vent, and mixer for culinary arts); and there will be a continuing need to upgrade and replace current equipment. However, the lack of appropriate buildings appears a far weightier concern than these issues.

EXHIBIT III-5

A COST SUMMARY OF CIT'S EQUIPMENT NEEDS BY PROGRAM

Program	Total Purchase Costs[1]	Equipment Description
Surveying Technology	$41,165	Computers, printer, SOKKIA Set 5
Accounting	$6,550	Furniture
Applied Computer Technology	$144,601	Computers, software, printers
Secretarial Science	$67,370	Word processors, furniture
Nursing Assistant	$12,466	Bed, autoclave, teaching torsos, EKG machine, reflotron
Livestock & Range Management	$49,934	Tractor, plow system, front-end loader attachment, corral panels, pens, gates, microscope
Heavy Equipment Mechanics	$54,549	Engine, stand, floor crane, information center, engine analyzer, alignment package, balancer, brake shop
Air Conditioning, Heating, & Refrigeration	$0	No needs submitted
Building Maintenance	$13,594	Vise, bender, E.M.T.
Carpentry	$9,779	Specialty tools
Electrical Trades	$58,260	Computer, crimper, splitter, power technology system, control of industrial motors, static controls, electro-mechanical system
Culinary Arts	$120,312	Mixer, roll-in proofer, dough roller, tilt kettle, ovens, hood vent, dish dolly
Communication	$110,822	Computer lab, furniture
Mathematics	$11,875	Computer, TV, calculator
Thinking Skills	$9,608	Furniture, AV, TV, VCR
TOTAL	$710,885	

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[1] Maintenance will be performed by in-house staff.

Current Financial Status of CIT

As was the case with UTTC, CIT operates not from an endowment but from income negotiated on a year-to-year basis. The primary sources of income from 1987-88 to 1991-92 are shown on Exhibit III-6. The major sources have been the following:

- Student tuition and fees, paid through scholarships and grants;
- The Navajo Nation Tribal Grant, financing administrative, maintenance, and financial services;
- Various grant programs sponsored by the U.S. Department of Education, including vocational education, adult education, drop-out prevention, women's educational equity, and Tribally Controlled Postsecondary Vocational Institutions; and
- State of New Mexico.

No students in the past have been able to afford to pay for tuition, room and board, or fees. When CIT has tried to collect the "family's share," it has not succeeded. Thus, when tuition is paid, it comes from another source. Because of the college's dependence on scholarship and grant funds, all students accepted to CIT are asked to apply for Pell Grants; most are also asked to apply for Navajo Tribal Scholarships. Exhibit III-7 details the number of Pell Grants students received; in the last three years, over 85 percent of CIT students have received full or partial Pell funding. This grant program has been the most consistent source of grant funds over the past five years, supplying CIT with $108,386 to $268,557. Navajo Tribal Scholarships supplied from $68,751 to $97,491 in the last four years. The administration at CIT feels that if the institution could accommodate more students, it could attract many more Navajo Tribal Scholarship dollars. Last year, the Navajo tribe provided $6,032,176 to 2,921 undergraduate students to attend institutions of higher education. CIT could admit only 45 of those funded students.[39] JTPA contracts, active from 1987-88 through 1990-91, have been another significant

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[39] Bureau of Indian Affairs Higher Education Grant Program, *Annual Report for 1991-92 Academic Year.* The report does not isolate grants made for the study of vocational-technical fields.

EXHIBIT III-6

CIT'S MAJOR SOURCES OF FUNDING

Funding Sources	Major Use of Funds	Amount of Funds (Dollars)				
		1987-88	1988-89	1989-90	1990-91	1991-92
Student Tuition & Fees:	Tuition, room/board, books, supplies, personal, and transportation					
PELL Grant		$108,386	$207,106	$268,557	$197,481	$211,157
Navajo Tribal Scholarships		0	79,264	97,491	68,751	92,956
JTPA Contracts		323,334	473,214	388,839	227,853	0
BIA Assistance		44,762	26,764	3,000	0	0
American Indian College Fund		0	0	0	10,000	10,000
Other Student Financial Aid		0	21,902	0	5,578	0
		$476,482	$808,250	$757,887	$509,663	$314,113
The Navajo Nation Tribal Grant	Administration, financial, and maintenance operations	$931,292	$820,700	$410,350	$800,000	$920,000
U.S. Department of Education:	Instructional program/student services					
Vocational Education		$403,430	$232,600	$0	$0	$0
Adult Education		135,079	107,896	0	0	0
Drop-Out Prevention		139,501	11,929	91,764	0	0
Women's Educational Equity		0	76,280	9,402	0	0
Tribally Controlled (Perkins)		0	0	0	0	1,661,608
		$678,010	$428,705	$101,166	$0	$1,661,608
Economic Development Administration	Renovation, site work	$0	$0	$0	$0	$2,400,000
NM Department of Education:						
Adult Basic Education	Instructional program/student support services	$0	$23,797	$20,000	$21,800	$25,282
Consumer Education		0	30,000	28,235	27,000	0
Handicapped Services		0	0	0	6,097	0
Disadvantaged Services		0	0	0	23,649	0
Child Care Services		0	0	0	12,000	0
		$0	$53,797	$48,235	$90,546	$25,282
NM Department of Labor:						
On-the-Job Training	Day care providers, other trainee wages	$0	$0	$0	$11,671	$0
SAE Contract	Nursing assistant program	0	0	0	0	75,000
		$0	$0	$0	$11,671	$75,000

EXHIBIT III-6 (Cont.)

CIT'S MAJOR SOURCES OF FUNDING

Funding Sources	Major Use of Funds	Amount of Funds (Dollars)				
		1987-88	1988-89	1989-90	1990-91	1991-92
Others:						
Bureau of Indian Affairs	Facility repairs	$250,000	$0	$0	$0	$0
Bureau of Indian Affairs	Instructional programs	0	0	493,000	0	0
Navajo Dept. Employment & Trng.	Community benefits (day care)	0	0	0	21,800	0
Navajo Dept. Employment & Trng.	JOBS basic academic/pre-emp. skills	0	0	0	22,786	0
U.S. Dept. Health & Human Svcs.	High School Entrepreneurship Prgm.	0	0	45,686	51,292	45,278
US West Foundation	Articulation	0	0	0	0	50,000
In-House (e.g., vending machines, facility use charges)	Board of directors' discretion	115,342	157,428	101,493	79,653	107,172
NM Child Care Food Program	Food cost (day care)	0	0	0	15,955	16,000
NM Title XX	Day care operation	0	0	0	28,580	25,000
Navajo Nation Health & Social Svcs.	Day care building	0	0	0	0	63,606
		$365,342	$157,428	$640,179	$220,066	$307,056
TOTALS		**$2,451,126**	**$2,268,880**	**$1,957,817**	**$1,631,946**	**$5,703,064**

EXHIBIT III-7

CIT STUDENT PELL GRANTS

Category	1987-88	1988-89	1989-90	1990-91	1991-92
Total enrollment	140	221	150	125	187
No. of students receiving full Pell grants	*	110	117	85	96
No. of students receiving partial Pell grants	*	22	11	25	66
Percentage of fully funded students (%)	*	50	78	68	51
Percentage of partially funded students (%)	*	10	7	20	35
Percentage of all students receiving Pell funding (%)	*	60	85	88	86

* Not available.

source, supplying $227,853 to $473,214 to support a developmental studies program. However, JTPA did not choose to renew their contract with CIT for the 1991-92 school year. The contract is still under negotiation for the 1992-93 year.

CIT has organized its student acceptance and registration procedures to maximize the amount of scholarship funds it receives. However, the size of funding from these sources changes from year to year. In 1988-89 it was at a high of $808,250. In 1991-92 it was at a low of $314,113 because of the lack of JTPA funds. With such wide variation it is difficult for college planners to depend upon it as a source of funding.

The yearly grant from the Navajo Nation has also varied considerably, from a low of $410,350 in 1989-90 to a high of $931,292 in 1987-88. The Nation is currently experiencing a loss of Federal funding, and future funding for CIT may be reduced from the $800,000 to $900,000 levels of the last two years.

CIT staff have received grants from the U.S. Department of Education in a variety of areas. In earlier years, three sources contributed to funding for instructional programs and student support services: vocational education grants, adult education, and drop-out prevention. Women's Educational Equity Act funds assisted in funding day care services in 1988-89 and 1989-90. Perkins funds, in the amount of $1,661,608 contributed a substantial portion of the operating budget in 1991-92.

The Perkins funding includes a substantial amount for personnel salaries: $991,775 will pay for the following:

- All faculty, aides, and secretaries involved with instructional programs, including developmental studies and continuing education;
- Administrative personnel, including the director of student services, guidance counselor, placement officer, registrar, public relations officer, financial aid officer, administrative clerk, payroll clerk, and warehouse aide;

- Staff in the dormitory, day care center, and food services; and
- Security guards.

Additional costs paid for under this contract are:

- Fringe benefits ($226,627) for staff;
- Travel ($21,030);
- Selected training equipment, including a mini-computer ($221,495);
- Expendable supplies ($73,931);
- Stipends for students to assist with transportation, books and supplies, and boarding costs ($70,000);
- Outside professional services for upgrading and implementing training programs ($26,750); and
- Repairs and maintenance of buildings, equipment, and vehicles ($30,000).

New Mexico's Department of Education has funded specific services in the last four years, including adult basic education, consumer education, services for handicapped and disadvantaged students, and child care services. The amounts are modest, from $6,097 for handicapped services in 1990-91 to $30,000 for consumer education in 1988-89. The New Mexico Department of Labor funded on-the-job training for day care workers, and a warehouseman and receptionist, etc., in 1990-91 and the new nursing assistant program in 1991-92.

Other sources of funding have been forthcoming in some years. The Bureau of Indian Affairs paid $250,000 for facility repairs in 1987-88 and $493,000 to support instruction and student services in 1989-90. The Navajo Department of Employment and Training helped fund the day care program and a JOBS program in pre-employment skills in 1990-91. Funds from the U.S. Department of Health and Human Services established a high school entrepreneurship program in 1989-90 which is still functioning. The U.S. West Foundation contributed $50,000 in 1991-92 to assist with articulation, that is, with negotiations with other institutions for the transfer of CIT credits. The Child and Adult Care Food Program, State Title XX, and Navajo Nation Health and Social Services funds helped meet day care costs in 1990-91 and/or 1991-92.

In-house collections of money are used each year at the discretion of the Board of Directors. In particular, funds from vending machines, the laundry, rental of facilities for meetings or other events, and catering are collected by the college and used as a "general fund."

The Economic Development Administration is funding extensive site work in 1991-92, which will include the following changes:

- Improvements in the drainage swales, roads, walkways, and parking areas;
- Demolition of the training and administration building;
- Installation of 12 modular buildings and modular restroom facilities;
- Repairs to the two wings of the dormitory that are still in need of new floors; and
- Renovation of the support building to respond to structural stresses, enlarge the kitchen area and improve the library.

These changes begin the process of creating campus facilities that can withstand the stresses of being located on a wash that has collapsible soil.

In summary, the college supports itself financially on a year-to-year basis. Each of the agencies from which it receives grants requires yearly renewals/applications. Sometimes monies that have been forthcoming for years (e.g., JTPA) are not renewed. So, it is difficult for CIT staff to budget for the coming years.

Traditionally, funding from the Navajo Nation has paid for administrative staff and financial and maintenance operations. As of January 1992, however, CIT had heard that the Nation was contemplating severe cuts in their funding of the program. Thus, a situation that requires yearly scrambling for funding continues.

The Perkins funding has supported the academic programs and support services offered by CIT in 1991-92; it is the hope of the college's administrators and staff that this will continue.

With funding from the Navajo Nation, the state, and other sources where grant proposals are pending, the college can continue to operate.

However, it has been difficult to find funding for facilities improvements. The current grant from the Economic Development Administration has begun the improvement process. Funding for building additional facilities is still needed.

Summary of Facility and Equipment Needs

The staff at Crownpoint Institute of Technology have created a clear vision of the institution they would like to build and the offerings of that college. They wish to serve the people of the Navajo Nation through a two-year vocational-technical college that is large enough to serve the needs for such training. Growth from its present enrollment of about 150 students to 600 students is a part of that vision. Expanding curricular offerings into a variety of new fields is also a part.

At the same time that goals have been set to expand and improve course offerings, the college is experiencing a crisis in its facilities. Although the buildings are not old (most were constructed in 1979), the main structure which houses administrative staff, classrooms, and training bays must be demolished this fall because of structural problems. It will be replaced by temporary modular buildings. But these, in turn, need to be replaced by permanent structures.

If it is to expand, other facilities also need to be constructed: a new dormitory for single students, family housing, additional housing for faculty and staff, recreational and athletic facilities, and maintenance facilities. Renovations are needed to the support building to increase the size of its cafeteria and improve its spatial layout.

The Campus Master Plan, devised by Leedshill-Herkenhoff, Inc., responds to each of these needs. Exhibit III-8 summarizes the plan. This architectural firm has divided the construction/renovation process into 10 phases. In each phase, they describe the work to be

EXHIBIT III-8

LEEDSHILL-HERKENHOFF ESTIMATES OF CIT'S FACILITIES CONSTRUCTION COSTS

Phase	Facility	Square Footage	Estimated Cost of Construction/ Renovation
1	Dormitory	71,400	$7,775,000
2	Family Housing	10,750	980,000
3	Trades Facility	53,625	4,305,000
4	Technology Facility ■ Technology ■ ABE/GED	45,875	3,750,000
5	Administration Facility ■ Administration ■ Library ■ Lecture Hall	26,493	2,355,000
6	Recreation	33,187	3,185,000
7	Support Building ■ Student Union ■ Day Care	27,645	1,585,000
8	Animal/Range Science	8,725	742,000
9	Faculty/Staff Housing	28,500	2,600,000
10	Maintenance/Warehouse	6,440	560,000
	TOTAL	**312,640**	**$27,837,000**

done, the square footage to be created, and the estimated cost. To accomplish all phases of the plan, the cost is $27,837,000--a sizeable figure. It is important to note that there is not an exact time frame tied to these construction efforts. Leedshill-Herkenhoff was asked to design the optimal campus for serving 1,000 students. Over the next five years, CIT will be able to use the temporary modular buildings for instruction and office space; existing dormitory, support building, and day care facilities will continue to function well. The central problem, which is addressed in the companion report to this one, is the assignment of priorities to the building or expansion of each of the proposed structures and of a time frame for completion of construction to fulfill the vision of CIT for its future.

CHAPTER 4

CONCLUSIONS AND RECOMMENDATIONS

Crownpoint Institute of Technology (CIT) and United Tribes Technical College (UTTC) are institutions dedicated to providing superior vocational-technical education to American Indian students in a campus-based setting. They seek to provide state-of-the-art training in occupations with maximum job-placement potential that will ensure long-term economic self-sufficiency for students and their families. UTTC offers one-year certificates and two-year associate of applied science degrees in four vocations and one-year certificates in six others. Students must additionally complete a number of general education requirements to earn their degrees. CIT offers one-year certificates in 12 vocational areas and has plans to expand to an additional 13 in the next five years and to extend some programs to two-year degree programs.

The institutions also feel that their mission extends beyond the simple provision of vocational-technical education to a select group of students; it includes ensuring that the education the schools provide strongly supports American Indian self-identity, culture, and community. For instance, one of UTTC's basic objectives is to "provide an inter-tribal forum and special projects aimed at the perpetuation of the tribal rights and economic progress of American Indians."[41] CIT has a commitment to ensure that Navajo cultural values are incorporated into all activities. Moreover, many of the institutions' students come from disadvantaged backgrounds, and their success at the two institutions depends upon a wider range of service offerings than most liberal arts colleges traditionally provide. For example, 40 to 50 percent of the students at these schools are single or married parents; most care for their children while attending the institution. In order to serve these students, UTTC provides day care, an elementary school, medical services, and family--as well as dormitory--housing. CIT offers full-day child care for preschoolers and before- and after-school care for the older children of commuters. But CIT only has housing for single students and finds itself turning away many students with families that the college would like to serve. Housing and a basic living stipend must be provided for virtually all students free of cost. In addition, many students require a variety of personal counseling and academic tutoring as well as supplementary courses in basic survival skills such as financial planning, parenting, and communications skills. Both schools also need recreational facilities for their students; UTTC has a pressing need for transportation for their students as well.

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[41] *UTTC General Catalogue*, p. 10.

All of these instructional and support services are facilities-based, but at present, facilities are inadequate at both campuses. CIT's one building for classrooms and staff offices is slated for demolition in the fall of 1992 and will be replaced by temporary modular facilities. Plans for permanent structures have been prepared by architects, but there is not yet money to fund the construction. A single dormitory provides housing for only 110 single students, and no rental properties are available within 60 miles for single or married students, facts that seriously limit the number of students the college can serve. Its library and cafeteria need to be expanded and recreational facilities need to be built, particularly since the institution plans to increase its enrollment from 110 to about 600 students in the next five years.

UTTC is able to provide a wide range of instructional and support services, but often they are in makeshift or deteriorating facilities built at the turn of the century. Housing conditions and capacities are a particular problem. Single-student dormitories are deteriorating both inside and out; the buildings lack modern heating and plumbing systems and are in need of major roof repair to prevent further damage to supporting brick walls. Further, dormitory rooms are overcrowded and furnishings are soiled and damaged. Family housing is more modern, though often poorly constructed and furnished sparsely. Demand for family housing exceeds capacity, and students with families often wait for a year for housing after admission to the program. UTTC instructional facilities are designed to accommodate over 400 students, but the school is prevented from increasing its enrollment from its current level of 284 because of the lack of additional housing. Should it expand, it would also require additional staff and office space and improved recreational and social facilities. Thus, in order to carry out its mission successfully and serve an optimal number of students, UTTC needs to undertake both major renovation of existing facilities and construction of new housing stock.

Unfortunately, neither institution currently receives much funding earmarked for capital improvement such as major repairs, renovations, or construction. Bureau of Indian Affairs monies for UTTC and Navajo tribal appropriations for CIT, in combination with U.S. Department of Education appropriations, constitute the major sources of funding for the schools. None supports expenditures for capital improvements. The schools have had difficulty finding other private or public grants to support such improvements. A one-time grant from the Economic Development Administration will fund site work at CIT and its new temporary classroom and office facilities. A similar grant to UTTC will pay for a new 16-unit family housing facility. However, these grants do not fully satisfy the institutions' needs and do not constitute a stable, reliable source of funding. In addition, due to a lack of collateral,[42] UTTC cannot lease nearby facilities or obtain commercial loans to construct new ones. At present, major solutions to the institutions' facilities problems have not been found.

Training equipment is in adequate supply at both institutions, although UTTC staff reported that their equipment does not always meet 1990s occupational standards. CIT staff were concerned that programs were expanding and that, while equipment is adequate for the current enrollment, more will be needed for new programs and the increasing numbers of students. New

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[42] UTTC does not own its land or buildings, but rather leases them on a 30-year quit rent from the Federal government.

Carl Perkins funds from the U.S. Department of Education have enabled the schools to purchase some badly needed equipment--particularly computers--this year, although many needs remain.

In conclusion, if the schools' are to realize their goals for expansion of enrollment and delivery of state-of-the-art training, they must satisfy three facilities and training equipment needs:

- The need for major renovation of existing facilities, particularly at UTTC, where most facilities in use were constructed in the first decade of this century;
- The need for construction of new family housing at both schools and administration and classroom buildings and recreational facilities at CIT; and
- The need for regular procurement of state-of-the-art vocational training equipment commensurate with the institutions' instructional programs.

Options for meeting these needs are evaluated in the companion volume to this report, where we examine the schools' goals in the context of the tribal economic development plans and the states' employment projections. Specific recommendations for funding are also provided in that report, which prioritizes facilities, housing, and training equipment needs and projects the costs of meeting these needs over the next five years.

FIVE-YEAR PROJECTIONS FOR MEETING FACILITY AND HOUSING NEEDS

TABLE OF CONTENTS

Page

EXECUTIVE SUMMARY iii

CHAPTER 1: INTRODUCTION 1

CHAPTER 2: FACILITIES AND EQUIPMENT NEEDS OF UNITED TRIBES TECHNICAL COLLEGE 3

- Introduction 3
- Tribal Overall Economic Development Plans and the Occupational Outlook for North and South Dakota 5
- UTTC'S Facilities Needs and Alternative Solutions 12
  - Option One—No Increase in Enrollment and Fulfillment of Basic Facilities Needs .. 16
  - Option Two—Increase in Enrollment and Fulfillment of Basic Facilities Needs 19
  - Option Three—Increase in Enrollment and Fulfillment of All Facilities Needs 21

CHAPTER 3: FACILITIES AND EQUIPMENT NEEDS OF CROWNPOINT INSTITUTE OF TECHNOLOGY 25

- Introduction 25
- The Navajo Nation's Overall Economic Development Program and the Occupational Outlook for New Mexico and Arizona 26
- CIT's Facilities Needs and Alternative Solutions 31
  - Option One—No Increase in Enrollment and Fulfillment of Basic Facilities Needs .. 31
  - Option Two—Increase in Enrollment and Fulfillment of Basic Facilities Needs 33
  - Option Three—Increase in Enrollment and Fulfillment of All Outstanding Needs ... 33

CHAPTER 4: CONCLUSIONS 39

EXECUTIVE SUMMARY

This is the second of two reports prepared for the Department of Education as part of a task order entitled, "An Assessment of Training and Housing Needs within Tribally Controlled Postsecondary Vocational Institutions." The goal of the task order is to describe the facilities, equipment, and housing needs of the two institutions receiving Federal Government assistance under Section 384 of the Carl D. Perkins Vocational and Applied Technology Education Act Amendments of 1990. These institutions are the United Tribes Technical College (UTTC) in Bismarck, North Dakota; and the Crownpoint Institute of Technology (CIT) in Crownpoint, New Mexico. The first report assessed the degree to which facilities and equipment needs can be met by the institutions' current financial structures and catalogued outstanding needs. This second report addresses the objective of Section 389(b) of the Act, which is to conduct "a long-term study of facilities of each institution eligible for assistance" under Section 384, including "a 5-year projection of training facilities and equipment and housing needs, [considering] such factors as projected service population, [and] employment and economic development forecasting, based on the most current and accurate data available from the institutions and Indian tribes affected." In keeping with this mandate, we have accomplished two goals in this report:

- To place the institutions' facilities and equipment needs in the context of the five-year economic development plans of the tribes they serve and the employment projections of the states in which they are located; and
- To project the institutions' needs for facilities and equipment over the next five years and the costs associated with meeting these needs, based on the most current and accurate data available from the institutions.

Economic Development Plans and Employment Projections

The economic development plans of the tribes served by these schools were useful as a context: all six of the tribes are planning to expand their current industry and/or tourism. The colleges offer training in a number of relevant fields, thus producing trained personnel to help meet tribal goals.

The employment projections of the states demonstrated that both colleges are preparing students for some occupations where employment projections suggest there will be numerous job openings over the next 10 years and for some where there will be at least minimal openings.

Projections of Needs Over the Next Five Years

For each institution, we developed three options for meeting facilities, equipment, and housing needs. The first option assumes no growth in enrollment and the satisfaction of basic needs for the next five years. The second provides for increased enrollment and the satisfaction of basic academic and support facilities needs. The third supplies optimal solutions to current facilities, equipment, and housing inadequacies, including academic, support, and recreational facilities.

United Tribes Technical College

Option One. The goals of this option are to enable UTTC to repair all facilities that are either imminently threatened by serious deterioration, uncomfortable, or unsafe to use in their present condition. It also allows for construction of a nursery facility, an elementary school building, and a transportation building for the storage and repair of vehicles. The total five-year costs under option one are $2,535,331, for an annual average of $507,066.

Option Two. All repairs, renovations, and construction taking place under option one would also occur under the second option. In addition, this second option calls for renovations of the cafeteria and administrative offices. The increase in enrollment would also require construction of both new single-student dormitories and new family housing, since housing is currently at or slightly over capacity for single students and over capacity for families. Annual facilities costs under this plan would average $1,293,756, for a five-year expense of $6,468,780.

Option Three. Most renovation/repair and construction called for under options one and two would also occur under this option. However, the need for enlargement of current administrative offices and four classrooms and renovation of the Four Winds Cultural Center would be negated by the construction of a new multi-purpose cultural center/classroom/office building. Two additional structures would be renovated: certain administrative offices, and the swimming pool. And two additional facilities would be built: a student union/recreation center, and a student mailroom and supply/distribution center with handicapped access. The total cost of this option is estimated at $12,619,780. Average annual expenditures would amount to $2,523,956.

Crownpoint Institute of Technology

Option One. The primary goal of this option is to replace the training and administration building that is being torn down in the fall of 1992 by constructing new facilities. Three buildings will be constructed: a trades facility containing classrooms and laboratories; a similar technology facility with classrooms and work space; and an administration building housing staff offices and student services. The total cost of this option is $10,410,000 or an average of $2,082,000 per year.

Option Two. The goal of this second option is to increase the educational facilities and housing stock to ensure that CIT can expand its enrollment to approximately 600. In addition to the three buildings designated for construction in option one, a dormitory for single students and housing for families will be built. The support services building will be renovated to serve the larger number of students. The total cost of facilities improvements in this option is $20,750,000, or an average of $4,150,000 in each of the five years.

Option Three. This option meets the full set of construction and renovation needs described in the first report. In addition to the buildings constructed and renovated under Option two, this option calls for the construction of faculty/staff housing, a maintenance building/ warehouse, a recreation building, and a structure to house animal and range science. The total cost of this option is $27,837,000, for an average cost of $5,567,400 in each of the five years under study.

Summary of Costs

Option one, the least costly approach, meets the most urgent current needs of the institutions, at a cost of about $2,500,000 for the institutions per year for each of the five years of our projection. The primary advantage of the option is its cost; the primary disadvantage is that it fails to allow the institutions to expand to serve the needs for vocational-technical training that they believe exist.

Option two recommends that the institutions expand their enrollment and that their basic needs for facilities be met. The combined cost of this option is approximately $5,500,000 per year for the two institutions. Its major advantages are that the institutions will be able to train a larger number of students in adequate facilities. Its disadvantage is that a number of facilities needs remain unfilled.

Option three recommends meeting all of the facilities and housing needs expressed by the institutions. This option is estimated to cost approximately $8,000,000 per year, combining expenditures for the two colleges.

CHAPTER 1

INTRODUCTION

This is the second of two reports from a study of the training facilities and equipment and student housing needs of the institutions receiving Federal Government assistance under the Tribally Controlled Postsecondary Vocational Institutions Program. Currently, two institutions are eligible for this aid: the Crownpoint Institute of Technology (CIT) in Crownpoint, New Mexico and the United Tribes Technical College (UTTC) in Bismarck, North Dakota. The goals of the task order are (1) to assess eligible institutions' training facilities and equipment and student housing and (2) to define the needs for renovation or construction of facilities and repair or purchase of equipment over the next five years.

The first report of the study contains a description of the mission and goals of each institution; a snapshot of the programs offered by each; a description of the current training facilities, equipment, and student housing; a discussion of the finances supporting the programs and facilities; an assessment of the degree to which facilities and equipment needs can be met by the current financial structure; and an examination of outstanding needs that require additional funding.

This second report addresses the objective of Section 389(b) of the Act, which is to conduct "a long-term study of facilities of each institution eligible for assistance" under Section 384, including "a 5-year projection of training facilities and equipment and housing needs, [considering] such factors as projected service population, [and] employment and economic development forecasting, based on the most current and accurate data available from the institutions and Indian tribes affected." We have interpreted this mandate to include (1) an assessment of eligible institutions' training facilities and equipment and student housing and (2) a definition of the needs for renovation or construction of facilities and repair or purchase of equipment over the next five years. This second report accomplishes this mandate in two ways. First, it places the institutions' facilities and equipment needs in the context of the five-year economic development plans of the tribes they serve and the employment projections of the states in which they are located. It then projects the institutions' needs for improved training facilities and equipment and student housing over the next five years, and the costs associated with fulfilling them. For each institution, three options are developed for meeting its needs: one assuming no growth in enrollment and the satisfaction of basic facilities needs for the next five years; a second providing for increased enrollment and the satisfaction of basic facilities needs; and a third supplying optimal solutions to current facilities inadequacies.

CHAPTER 2

FACILITIES AND EQUIPMENT NEEDS OF UNITED TRIBES TECHNICAL COLLEGE

Introduction

United Tribes Technical College (UTTC) provides vocational and technical education in 11 fields to American Indian students from up to 30 tribes inside and outside the Dakotas. The college offers two-year Associate of Applied Science (AAS) degrees in business/clerical, criminal justice, licensed practical nursing (LPN), and medical records technology. One-year certificates are also currently available in the fields of automotive service technology, business/clerical, carpentry, criminal justice, early childhood education, electrical trades, food service, medical records, plumbing, and welding. Two-year certificates are offered in automotive service technology and early childhood education. The college's mission is to educate students for self-sustaining employment in occupations with maximum job placement potential in the state, region, and Indian communities from which students are drawn. Many of its students come from academically and economically disadvantaged backgrounds and bring spouses and children with them to the institution. Therefore, UTTC must provide its education in a residential setting that offers a variety of critical support services, such as child care, counseling, and medical care. In addition, the college would like to expand from its current annual enrollment of 284 to 400 students to maximize use of its instructional capacity.

In our first report, we noted that, to meet its objectives, UTTC must remedy certain deficiencies in the areas of housing, facilities, and training equipment. These include:

- Major repairs to many of the campus' original facilities, fast approaching a century in continuous use. Roofs and windows are in most pressing need of repair to prevent heat loss and further deterioration of supporting brick walls. Substantial interior repairs are also needed to make existing housing, many administrative and counseling

122

offices, and student services such as the library, cafeteria, swimming pool, and cultural center/art museum more habitable and useful.

- Additional construction of new family housing, single-student dormitories, a multi-purpose classroom and office facility, child care facilities, a student union, and miscellaneous support buildings such as a transportation warehouse and distribution/mail center.

- More state-of-the-art training equipment that reflects current practice in the occupational areas for which UTTC trains its students. Funding from the U.S. Department of Education in FY91 under the Tribally Controlled Postsecondary Vocational Institutions Program (also known as Perkins funding) allowed the college to purchase some new equipment, but additional needs exist.

We noted that the college is currently faced with four primary financial problems that prevent it from meeting its infrastructure and equipment needs with its current budget:

- The Bureau of Indian Affairs (BIA)—its major source of funding—does not allow its appropriations to be spent on major renovation and construction.

- The college has had difficulty finding other sources of public or private funding that will support major capital improvements.

- Below-normal indirect cost returns on contracts from several Federal and state agencies force the college to use its BIA monies to support these contracts' overhead instead of buying new equipment or making minor facility repairs.

- A lack of collateral prohibits the college from leasing facilities or securing loans for capital improvement.

In addition, UTTC is plagued by an inability to perform long-term budgeting or planning, since virtually all of its operating appropriations are subject to annual renewal. In recent years, the administration has had to fight regular battles to ensure that the college's allotments under its major BIA contract are not reduced. We concluded that although many of UTTC's infrastructure and equipment needs could be met over a five-year period, the institution requires substantial additional funding in the near future to continue to provide a first-rate vocational and technical education to an often disadvantaged—and historically neglected—population of American Indian students.

In the following sections of this report, we analyze the human resource projections suggested by the overall economic development plans of the five United Tribes of North and South Dakota[1] and North and South Dakota state employment forecasts to provide a context for evaluating UTTC's needs. Then we review UTTC's specific infrastructure and training equipment needs and the costs associated with meeting them (as discussed in the first report). Finally, we prioritize these needs in terms of the importance of meeting them over the next five years, and present three different plans for remedying deficiencies.

Tribal Overall Economic Development Plans and the Occupational Outlook for North and South Dakota

The college's programs of study are tailored as much as possible to meet the economic development needs of the five United Tribes. These needs are detailed in the tribes' overall economic development plans (OEDPs). Unfortunately, none of these plans provide employment or human resource projections specific enough to serve as a reliable guide for curriculum planning. They do, however, provide some indication of the projected human resource needs in particular vocational trades. These needs are summarized in Exhibit 1. Occupations listed under North and South Dakota employment projections are those for which annual total openings[2] of 200 or more jobs are expected in North Dakota between 1988 and 2000, and annual total openings of 300 or more jobs are expected in South Dakota between 1989 and 2000, ordered by the number of job openings (highest first).

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[1] The five United Tribes are the Turtle Mountain Band of Chippewa at Belcourt, the Devils Lake Sioux at Fort Totten, Three Affiliated Tribes (Mandan, Hidatsa, and Arikara) of Fort Berthold at New Town, the Sisseton-Wahpeton Sioux, and the Standing Rock Sioux at Fort Yates.

[2] Annual total openings is defined as annual net separations (entrances minus exits) in each occupation *plus* annual growth in each occupation.

EXHIBIT 1

UTTC Graduates' Employment Opportunities Related to Economic Forecasts

Source	Primary Needs—1988-2000
Turtle Mountain Band of Chippewa—Economic Development Plan	Data entry computer operators Auto mechanics/welders Health care workers Food service workers
Devils Lake Sioux—Economic Development Plan	Construction workers Food service/bakery workers Meat, poultry, and fish cutters
Three Affiliated Tribes—Economic Development Plan	Construction workers Electrical workers Machine builders, operators, and mechanics Extractive and industrial engineers and workers
Sisseton-Wahpeton Sioux—Economic Development Plan	Small business/"Cottage Industries" personnel Service and retail trades personnel Tourism industry personnel
Standing Rock Sioux—Economic Development Plan	Construction workers Machine workers and assemblers Small business/"Cottage Industries" personnel Service and retail trades personnel Tourism industry personnel Farmers and agribusiness workers Extractive and industrial engineers and workers Telephone and electrical maintenance workers Health care workers Food service workers

EXHIBIT 1

UTTC Graduates' Employment Opportunities Related to Economic Forecasts (Continued)

Source	Primary Needs—1989-2000
State of North Dakota Employment Projections[1]	Janitors and cleaners Farmers Retail salespersons General managers and top executives Nursing aides and orderlies Secretaries, except legal and medical Registered nurses General office clerks School bus drivers Cashiers Maids and housekeeping cleaners
State of South Dakota Employment Projections[2]	Janitors and cleaners Retail salespersons General office clerks Waiters and waitresses General managers and top executives Nursing aides and orderlies Household cleaners and servants Public administration executives Farmers and farm workers Kindergarten and elementary teachers General secretaries

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[1] Pederson, Tom, and Broschat, Duane. *North Dakota Employment Projections to 2000.* Bismarck, ND: December 1991.

[2] South Dakota Department of Labor, Labor Market Information Center (data base information).

According to its OEDP, the Turtle Mountain reservation is small (72 square miles), densely populated (12,000 members on or adjacent to the reservation), and not suitable for agriculture. Currently, it is home to two industries: Uniband and the Turtle Mountain Manufacturing Corporation (TMMC). Uniband is a tribally controlled data-entry firm with 25 employees and $6 million in future contracts with the Internal Revenue Service. TMMC is a 185-employee utility enterprise that makes cargo trailers and auto and truck parts. TMMC would like to expand its current facility by 20,000 square feet and install a new ventilation system. Uniband needs some renovations and upgrades as well. Currently, these firms primarily employ data entry computer operators and mechanics or welders skilled in auto body assembly. But given their expansion plans and a proposed 60-bed long-term health care facility for the reservation, the manufacturing and building trades may offer only temporary job potential at Turtle Mountain. If and when the long-term health care facility is built, there may also be a need for a small number of health care and food service workers.

The Devils Lake OEDP indicates that the people at Devils Lake are looking for additional industrial development. The tribe is hoping to open a fryer and poultry production/processing operation and a tribal farm. If the farm is established, a bakery could follow, providing some food service job opportunities. Like Turtle Mountain, these projects would also offer temporary opportunities in construction.

In its 1990 OEDP, the Three Affiliated Tribes propose a variety of manufacturing, infrastructure, health, energy, business, agriculture, and recreation projects. Construction would be required for all of them and would be particularly extensive in the infrastructure area. Manufacturing ventures might include electronics, sewing, and fish/meat processing plants. A coal plant, hydro-electric facility, drilling program, and oil refinery head the list of suggested energy initiatives. A new park, bingo halls, expanded lakeside recreation facility, and additional lodging would all add to the reservation's recreational potential. New job opportunities related to these ventures could include: machine builders, assemblers, technicians, operators, and mechanics; amusement and recreation attendants; extractive and industrial engineers, supervisors, and workers; agricultural engineers; meat, poultry, and fish cutters; oil and petroleum engineers, technicians, and machine operators; safety engineers; patternmakers, fabric and textile workers, and sewing machine operators; and hotel managers and workers.

The Sisseton-Wahpeton tribe is in the midst of a strategic planning project that will culminate in the preparation of an OEDP. Preliminary planning commission reports indicate that the tribe intends to develop its service, retail, tourism and "small business/cottage industry" potential in the coming years. These plans are not developed well enough to serve as firm indicators of reservation employment projections, but it is reasonable to assume that service, retail, and recreation managers and workers will be needed in addition to business administrators and administrative and secretarial office staff.

To eliminate its current unemployment rate of 79 percent, the Standing Rock Sioux tribe has adopted ambitious (and still tentative) economic development goals for its reservation. By the end of 1998, the tribe intends to create and support private and commercial enterprises resulting in a minimum of 500 new employment opportunities. Specific business development concepts include:

- A manufacturer of defense-related supplies employing 300;
- A bank or credit union;
- Tourism enterprises within each of the tribe's eight districts providing employment for at least 25 residents of each, including arts and crafts outlets, factory outlets, and motels;
- Agribusiness concerns such as a commercial buffalo herd, a meat-cutting and packing plant, poultry and hog businesses, fish hatcheries, and a lumber company;
- Energy-related industries including gravel, coal, oil, and gas extraction, a tribal propane business, and a telephone and electrical company;

- A "fully-staffed health care delivery system" requiring the services of more qualified and greater numbers of health care professionals, counselors, and community-based social workers; and
- Small commercial and convenience enterprises, such as beauty shops, hardware stores, eating establishments, a funeral home, a movie theater, and a tribal gaming business.

If these goals are realized, the reservation is likely to require additional service, retail, and production managers and workers in the coming decade.

State economic forecasts are more helpful to the college than the OEDPs in matching vocational programs with employment opportunities. They offer at least partial empirical evidence of the relevance of UTTC's vocational programs for the many UTTC students who seek employment within the two states. In Exhibit 1, janitors and cleaners, farmers, and retail salespersons are the three occupations with the largest number of projected annual openings in North Dakota (between 436 and 640 new jobs in each). Another eight occupations (i.e., general managers and top executives, nursing aides and orderlies, secretaries—non-legal or medical, registered nurses, general office clerks, school bus drivers, cashiers, and maids and housekeeping cleaners) will provide between 200 and 350 openings annually in that state. In South Dakota, the janitors and cleaners category will provide over 700 job openings, and the retail salesperson category will provide almost 600 openings. Between 400 and 500 job openings will occur in the general office clerk, waiter and waitress, general manager and top executive, and nursing aide and orderly categories. Other occupations listed in the exhibit will provide at least 300 openings in South Dakota.

Exhibit 2 presents statewide economic projections for occupational categories closely related to the vocations taught at UTTC and compares them to the vocational fields selected for study by UTTC students. It indicates that, in general, UTTC is offering vocational training programs in some of both states' rapidly developing industries with large numbers of projected annual job openings. In addition to the official state projections, we were told by staff at UTTC

EXHIBIT 2

Average Annual Openings in UTTC's Majors

UTTC Major	Occupational Category	North Dakota Average Annual Openings 1988-2000	South Dakota Average Annual Openings 1989-2000
Automotive service technology	Automotive body/related repairer Automotive mechanics	116	92
Business/clerical	Computer programmer aides Data entry keyers General office clerks Receptionists, information clerks Secretaries—not legal or medical	569	955
Criminal justice	Correction officers and jailers Police patrol officers	79	46
Early childhood education	Child care workers	62	198
Electrical	Electricians	33	69
Food service	Cooks Food preparation workers	504	721
Licensed practical nursing	Licensed practical nurses	75	118
Medical records technology	Medical records technologists	22	20
Plumbing	Plumber, pipefitter, steamfitter	37	60
Welding	Welders and cutters Welding machine operators Welding machine setter/ operator	37	86

that the Bureau of Indian Affairs (BIA) is particularly eager to obtain criminal justice graduates, since reservation police departments are chronically understaffed. Likewise, although automotive technology is not a particularly fast-growing trade, the UTTC automotive instructor is working to make his graduates highly competitive in the field by certifying them in four of eight automotive service excellence (ASE) specialty fields including: suspension and alignment, heating and air conditioning, brakes, and general engine repair. It seems reasonable then to infer that the college has matched its curriculum offerings to employment opportunities.

In order to provide such an education both efficiently and effectively, UTTC needs additional equipment and improvements to facilities. In the first report, we detailed immediate equipment needs requiring between $449,349 and $458,249. These needs—and others that will arise as equipment depreciates over time—could be met with annual Perkins allocations, as long as these allocations remain at their current level ($778,360 in 1991-92) or rise.

Current facilities needs, however, threaten to jeopardize the institution's ability to provide postsecondary vocational and technical education to its current population of students. As noted in our first report, 98 percent of UTTC's students come from economically and academically disadvantaged backgrounds. Forty percent of them have never lived outside of their reservations, and 47 percent are parents. Because of these unique student characteristics and needs, UTTC must provide its education in a residential setting that offers a variety of critical support services, such as child care, counseling, transportation, and recreational facilities.

At present, many of these housing and support service facilities need major repair, renovation, or replacement. In addition, faculty and administrative offices are over-crowded, and instructional facilities cannot accommodate classes with more than 25 students. On the other hand, most of UTTC's instructional facilities are modern and could serve a total student body of 400. However, the inadequate size and condition of housing prevents the college from enrolling more than 284 students. In the next section, we review UTTC's facilities needs and discuss three possible alternatives for meeting them, given associated cost estimates.

UTTC'S Facilities Needs and Alternative Solutions

In the first report, we discussed UTTC's facilities needs at length and presented two approaches for remedying these needs--a construction and a renovation approach--which are illustrated again in Exhibits 3 and 4. The construction approach involves total costs of $10,599,250 and is the approach favored by UTTC administrators. The renovation approach would cost $2,184,030. These two approaches are not mutually exclusive; however, adopting the construction approach would eliminate the need for some renovations.

In this report we have developed three options for satisfying UTTC's facilities needs, using the construction and renovation line items as the basis for our plans. The first option assumes no growth in the current UTTC student population, even though the school's instructional facilities are not currently operating at capacity. It is also designed to meet only the institution's most basic facilities needs, which would simply ensure UTTC's survival as a postsecondary vocational-technical institution. The first option is the least costly one described. The second option would allow UTTC to increase its student population to 400 students over the next five years but still satisfy only basic facilities needs. However, with an assumption of growth, "basic" needs are greater and costlier than under the first option. The third option would allow UTTC to increase its student body to 400 and would remedy all of its articulated infrastructure needs over the next five years. Exhibits 5 through 7 summarize each of these three options. Individual construction and renovation needs are prioritized over the next five years within each of the options, while an effort is made to keep necessary capital outlays as evenly divided over the five years as possible. Prioritizations and rationales for line-item expenses under each option are detailed below.

EXHIBIT 3

Summary of UTTC Facility Needs — Construction Approach

Function	Need	Square Footage	Cost Estimate
Housing			
Single-Student	One new men's and one new women's dorm	15,000	$2,655,000
Family Housing	24 units of additional family housing	12,450	932,250
Multi-Purpose Center	Cultural center/classroom/office building	40,000	4,576,800
Student Services			
Recreation/Athletics	Student union/recreation area over current swimming pool	9,000	1,139,400
Child Care Services and Elementary School Facilities	Separate nursery facility	5,300	475,000
	Additional elementary school building	6,000	687,000
Miscellaneous	New transportation building for vehicle repairs	2,700	81,000
	Mailroom/supply and distribution center	1,200	52,800
TOTAL		**91,650**	**$10,599,250**

EXHIBIT 4

Summary of UTTC Facility Needs — Renovation Approach

Facility Type	Facility Need	Estimate
Student Housing		
Single-Student Dormitories	Exterior repairs including roof shingling, porch renovation, and window and sidewalk replacement. Interior repairs including furnace replacement, bathroom renovation, ceiling repair, and furniture replacement.	$135,500
Family Housing	Exterior repairs including water service line replacement, siding replacement, porch renovations, and roof shingling. Interior repairs and installations including new water heaters, clothers washers and dryers, stoves, and refrigerators for some units, and floor, furnace, and furniture replacement for some units.	437,330
Instructional Facilities		
	Renovate four classrooms to accommodate larger number of students (over 25).	40,000
Faculty/Administrative Offices		
	Renovate a room for fireproof storage of records.	5,000
	Improve ventilation and climate control for five original buildings by installing furnaces and central air conditioning.	122,000
	Move some administrative offices to another building and enlarge and renovate the offices that remain in the administration building to accommodate computers and other equipment.	200,000
Student Services		
Counseling Offices	Develop more private counseling offices for career counseling by building partition in the large office in the Placement Department.	2,500
	Arrange for greater privacy in two counseling offices by installing insulation and soundproof tiles.	4,000
Library	Create additional seating space in library by constructing an archway between the existing library and the classroom directly north. Move classroom to one of those renovated above.	6,000
Athletics/Recreation	Renovate swimming pool.	500,000
Four Winds Cultural Center	Renovate old cultural center and museum facilities by gutting the existing building and renovating to include space for preservation and display of artifacts and works of art.	192,000

EXHIBIT 4

Summary of UTTC Facility Needs — Renovation Approach (Continued)

Facility Type	Facility Need	Estimate
Cafeteria	Increase seating space in existing cafeteria.	110,000
	Create additional storage space.	27,200
	Expand dishwashing area.	9,000
Miscellaneous		
	Repair exterior and interior of other original campus buildings including:	
	— Roof shingling for 5 campus buildings	34,500
	— Furnaces for 9 campus buildings	36,000
	— Porch renovation for 10 campus buildings	100,000
	— Air conditioning compressor for Child Development Center	2,500
	— Siding, shingles, door, insulation for chapel	7,500
Peripheral Repairs		
	Repair peripheral campus infrastructure including:	
	— Repair of street	150,000
	— Replacement of 10 existing fire hydrants	3,000
	— Replacement of sidewalk for 1 building	10,000
	— Repair of electrical lines	50,000
	— Repair and maintenance of sewer lines	100,000
	— Purchase of sewer cleaning machine	175,000
TOTAL		$2,184,030

EXHIBIT 5

Option One: UTTC Facilities Plan

Facility Need	1992-93	1993-94	1994-95	1995-96	1996-97	Total
Renovations/Repairs						
Single-student dormitories	$135,500					$135,500
Family housing	145,777	$145,777	$145,777			437,331
Fireproof record storage room	5,000					5,000
Library	6,000					6,000
Classrooms	40,000					40,000
Miscellaneous building	80,500*	50,000**	50,000**			180,500
Peripheral campus infrastructure		244,000	244,000			488,000
Construction						
Separate nursery facility				$237,500	$237,500	475,000
Elementary school building				343,500***	343,500***	687,000***
Transportation building	81,000					81,000
TOTAL	$493,777	$439,777	$439,777	$581,000	$581,000	$2,535,331

* All miscellaneous repairs except porch renovations.
** Porch renovations.
*** May be funded by BIA.

EXHIBIT 6

Option Two: UTTC Facilities Plan

Facility Need	1992-93	1993-94	1994-95	1995-96	1996-97	Total
Renovations/Repairs						
Single-student dormitories	$135,500					$135,500
Family housing	437,330					437,330
Administrative offices					$200,000	200,000
Fireproof record storage room	5,000					5,000
Cafeteria	146,200					146,200
Library	6,000					6,000
Classrooms	40,000					40,000
Miscellaneous buildings	180,500					180,500
Peripheral campus infrastructure	488,000					488,000
Construction						
Single-student dormitories		$885,000	$885,000	$885,000		2,655,000
Family housing		621,500		310,750		932,250
Separate nursery facility			475,000			475,000
Elementary school building					687,000*	687,000
Transportation building			81,000			81,000
TOTAL	**$1,438,530**	**$1,506,500**	**$1,441,000**	**$1,195,750**	**$887,000**	**$6,468,780**

* May be funded by BIA.

EXHIBIT 7

Option Three: UTTC Facilities Plan

Facility Need	1992-93	1993-94	1994-95	1995-96	1996-97	Total
Construction						
Single-student dormitories	135,500					135,500
Family housing	218,668	218,665				437,330
Fireproof record storage room	5,000					5,000
Adminisrative office (climate control)			122,000			122,000
Cafeteria		110,000	36,200			146,200
Library	6,000					6,000
Swimming pool					500,000	500,000
Miscellaneous buildings	180,500					180,500
Peripheral campus infrastructure	488,000					488,000
Renovation/Repair						
Single-student dormitories	$885,500	$885,000	$885,000			$2,655,000
Family housing		310,750	621,500			932,250
Multi-purpose center				$2,288,400	$2,288,400	4,576,800
Student union/recreation center			569,700	569,700		1,139,400
Separate nursery facility	475,000					475,000
Elementary school building		687,000*				687,000
Transportation building		81,000				81,000
Mailroom/supply center		52,800				52,800
TOTAL	$2,393,665	$2,345,215	$2,234,400	$2,858,100	$2,788,400	$12,619,780

* May be funded by BIA.

Option One—No Increase in Enrollment and Fulfillment of Basic Facilities Needs

The goals of option one (see Exhibit 5) are to enable UTTC to repair all facilities that are either imminently threatened by serious deterioration, uncomfortable, or unsafe to use in their current condition. Dilapidated and drafty interiors in both single-student dormitories and family housing and over-crowding and inadequate capacity in the library, nursery, elementary school, and classrooms cause discomfort *even at the current enrollment of 284 students.* The plan assumes that both the UTTC student body and the number of their children will stay roughly constant over the next five academic years.

Specifically, in 1992-93, the college would fund repairs of existing facilities, including:

- Exterior and interior repairs to men's and women's single-student dormitories;
- Exterior and interior repairs to 50 family housing units (Since this is an expensive proposition of $437,330, repairs would be spread out over three years by renovating 16 to 17 units a year.);
- Renovation of a room for fireproof storage of the institution's records;
- Creation of additional seating space in the library;
- Renovation of four classrooms to accommodate class sizes of over 25 students; and
- Exterior and interior repairs to miscellaneous other campus buildings. (Roof shingling, furnaces, child development center, and chapel repairs would be performed in 1992-93, while more expensive porch renovations would be performed in 1993-94 and 1994-95.)

In addition, a new transportation building would be constructed in 1992-93 for storage and repair of vehicles. This building is relatively less costly than other new construction and is particularly vital, since UTTC has an aging transportation fleet that is in need of constant repair. The fleet is used to transport students and their families into Bismarck for vocational work, medical services, and recreation. Total costs in 1992-93 for this option are $493,777.

In 1993-94, 16 more family housing units would be renovated, and work would begin on peripheral repairs to supporting campus infrastructure. This work includes repair or replacement of a campus street, fire hydrants, sidewalks, electrical lines, and sewer lines and purchase of a sewer cleaning machine. The total cost of this peripheral work is expensive ($488,000) and thus would be spread over two years. However, this maintenance is critical to the campus' smooth operation and should be performed as early as possible in the five-year period. Finally, half of the deteriorating porches on 10 original buildings would be repaired in 1993-94 at a cost of $50,000. Total costs in this year are $439,777.

The last group of family housing units would be renovated in 1994-95, and all remaining peripheral and porch repairs would be made. Hence, total costs in this year would be the same as for the previous year.

In 1995-96 and 1996-97, UTTC would construct two new facilities, the cost of which would be split evenly between the two years. A separate and probably larger nursery facility costing $475,000 would be built to permit the women's dormitory to serve the exclusive function of housing adult students. In addition, a fifth elementary school building would be built to relieve the school of current overcrowding. The $687,000 cost of this structure may be borne by the Bureau of Indian Affairs (BIA), which built the original elementary school facilities. However, since UTTC must wait an unspecified amount of time (at least five years) for BIA funding, the college would prefer other funding for this facility. If the BIA pays for the elementary school structure, 1995-96 and 1996-97 costs will be $237,500 annually. If the expense is included in the present costing effort, annual costs in 1995-96 and 1996-97 will be $581,000.

The total five-year costs under option one are $2,535,331, for an annual average of $507,066.

Option Two—Increase in Enrollment and Fulfillment of Basic Facilities Needs

All repairs and renovations taking place under option one would also occur under the second option to halt deterioration and alleviate overcrowding. However, this second option also calls for renovations of two other facilities to create room for the projected growth of 116 students (see Exhibit 6). Specifically, the cafeteria would require additional seating and storage space as well as an expanded dishwashing area, at a total cost of $146,200. To accommodate the increased records and computer equipment necessary to handle a larger student body, current administrative offices would need to be enlarged and renovated in the administrative building or moved to other space. This change would entail relatively expensive plumbing, wiring, heating, and general structural modifications for a total cost of $200,000. Under option two, all necessary repairs and renovations (except enlargement of administrative offices) would take place in 1992-93, since many of these needs are immediate. Administrative office enlargement—an important but relatively less pressing priority under this scenario—would be delayed until 1996-97. The intervening years would be devoted to important new construction.

An increase in enrollment would require construction of both new single-student dormitories and new family housing, since housing is currently at or slightly over capacity for single students and over capacity for families, as described in our first report. One new family housing complex of 16 units is under construction this year (1991-92). It will provide room for between 16 (if all residents of the units are single parents) and 32 students (if all are married students.) Option two includes the construction of one additional 16-unit family housing complex and one additional eight-unit family housing complex—to be built in 1993-94 and 1995-96 respectively—at a total cost of $932,250. In addition, the plan calls for the construction of one new men's and one new women's dormitory holding 75 students together, at a total cost of $2,655,000, spread out over three years between 1993-94 and 1995-96. Including the new family housing complex under construction this year, the two new family housing complexes and two new dormitories planned for the next four years would provide space for between 115 and 155 new students, depending on whether single parents or married students and their families occupy the new family housing complexes. This new construction should meet the residential needs of the 116 new students slated for enrollment within the next five years.

Construction of a separate nursery facility, additional elementary school building, and transportation structure would also take place under option two for the reasons enumerated under option one. Hence, annual facilities costs under this plan would average $1,293,756 for a total five-year expense of $6,468,780.

Option Three—Increase in Enrollment and Fulfillment of All Facilities Needs

Option three entails the satisfaction of all of UTTC's stated facilities needs, given an assumption of student body growth of 116 over the next five years. Most renovation/repair and construction called for under options one and two also would occur under option three (see Exhibit 7). However, the need for enlargement of current administrative offices and four classrooms would be negated by the construction of a new multi-purpose cultural center/classroom/office building. In addition, this facility would eliminate the need to renovate the present Four Winds Cultural Center, as discussed under the original renovation approach. Preliminary planning suggests that the 400,000 square foot multi-purpose facility would cost $4,576,800.

Renovations of two additional structures would take place under option three. First, furnaces and air conditioning would be installed in five original campus buildings to make administrative offices there more comfortable at a total cost of $122,000. At present, old, centrally controlled heating systems designed for much larger spaces make many of these partitioned offices either uncomfortably hot or cold. In addition, the olympic-sized indoor swimming pool in the old gymnasium, which could serve as a vital center of family recreation, would be repaired at a cost of $500,000.

Two additional facilities would also be built under option three. First, a student union/recreation center would be constructed on top and east of the swimming pool, which would house weight rooms, handball/squash courts, and other athletic areas in a total of 9,000 square feet at an estimated cost of $1,139,400. Secondly, a student mailroom and supply/distribution center with handicapped access would cost $52,800.

Most renovations and repairs would again take place in 1992-93 under this option, since they are pressing needs. Expensive family housing repairs would be spread out over the first two years of the plan, however, and expansion of cafeteria seating space would be delayed until 1993-94. Improved administrative office climate control and expanded cafeteria storage and dishwasher area would be provided in the third year, since they are less pressing renovations. Swimming pool renovation—the least of the maintenance priorities—would occur in the fifth year (1996-97).

Construction of new residential units, nursery and elementary school facilities, and a transportation facility would all take place as quickly as possible, although the housing construction would, of necessity, be divided among the first three years due to high costs. The expensive multi-purpose center and student union/recreation center would be constructed in 1994-95 through 1996-97.

The total cost of this option is estimated at $12,619,780. Average annual facilities expenditures under the option would amount to $2,523,956.

CHAPTER 3

FACILITIES AND EQUIPMENT NEEDS OF CROWNPOINT INSTITUTE OF TECHNOLOGY

Introduction

The Crownpoint Institute of Technology currently serves the vocational-technical training needs of approximately 150 students from the Navajo Nation. One-year certificates are offered in 11 specialty areas: applied computer technology; accounting; secretarial science; livestock/range management; heavy equipment and diesel mechanics; air conditioning, heating and refrigeration; building maintenance; carpentry; electrical trades; surveying; and culinary arts. A one-semester nursing assistant course is also offered. By 1995 CIT would like to enroll 600 students, achieve technical college status by extending its one-year offerings to two-year degree programs, and expand the vocational and technical fields in which it offers programs.

To meet these objectives, CIT must resolve certain problems in the areas of housing and facilities:

- Its central training and administration building has suffered severe structural problems and will be razed this fall. Temporary modular buildings will be erected to house classes and staff offices; four programs will be housed in off-campus leased facilities. New permanent structures are needed.
- The dormitory houses a maximum of 110 students. To expand enrollment, new housing for single students and families must be constructed.
- Child care facilities are limited. An expansion of enrollment requires additional facilities for preschool and school-age children.
- Students currently have very limited space for recreation. Construction of a student union and recreational facilities is needed.
- The cafeteria is now working at capacity. An expansion of enrollment would necessitate expanding seating in the support building that houses this facility.
- A new animal and range science facility would extend the ability of this program to serve its students.

- Additional faculty and staff housing will be needed when the college's programs expand.
- Construction of a new warehouse and maintenance facility for maintenance staff, supplies, and equipment is needed.

Funding for CIT's program is supplied primarily by grants and scholarships for student financial aid, the Tribally Controlled Postsecondary Vocational Institutions Program, and the Navajo Nation. Additional funding has been available in some years from other programs operated by the U.S. Department of Education, Bureau of Indian Affairs, New Mexico Department of Education, Navajo Department of Employment and Training, and New Mexico Department of Labor. The college supports itself financially on a year-to-year basis as its staff apply for renewals of existing grants or for money from new sources. Sources willing to fund facility improvements are rare.

In the following sections, we place the institution's goals in the context of the Navajo Nation's overall economic development program for the next five years and the employment outlook for the states that include Navajo land—New Mexico, Arizona, and Utah. Then we will present three options for meeting the facilities improvement needs of the college.

The Navajo Nation's Overall Economic Development Program and the Occupational Outlook for New Mexico, Arizona, and Utah

The *1990 Overall Economic Development Program* of the Navajo Nation cites the following long-term goal: "to provide an environment conducive for commercial and industrial development on the Navajo Nation" (p. 2). Its program involves reducing existing barriers to the development of businesses and industry, developing new industrial parks, and promoting the Nation as a good place for business and industry to locate.

Specific goals include developing and operating facilities for tourists, such as small retail businesses, resorts, and a marina; developing and operating mini-malls in population centers;

constructing and repairing BIA housing; improving the regional water system; and investigating and promoting community development projects, such as the construction of senior centers and the extension of power lines (see Exhibit 8).

Some of these goals are relevant to CIT in that its graduates may find jobs as the Nation works toward meeting its goals. For example, retail businesses will require the services of accounting clerks and secretaries and may need computer programming aides or computer operators. The construction and repair of housing may use the services of air conditioning, heating and refrigeration technicians, carpenters, and electricians. Surveying technicians may be required to help with the planning of mini-malls and new housing. Food preparation and service workers will be needed in restaurants opened for tourists and in mini-malls for local residents. Building maintenance staff will be required by all new facilities.

Employment forecasting by the states of Arizona, New Mexico, and Utah also supports the vocational training supplied by CIT. Exhibit 8 summarizes the 10 occupational categories with the greatest number of annual openings in each state.[1] The three states overlap in five areas: general managers and top executives; cashiers; general office clerks; secretaries; and janitors and cleaners. Arizona's Department of Economic Security adds a prediction of extensive openings for retail salespeople; waiters and waitresses; food preparation and service workers; bookkeeping, accounting, and auditing clerks; and registered nurses. New Mexico's Department of Labor also predicts a relatively large number of openings among retail salespeople; waiters and waitresses; food counter workers; registered nurses; and heavy truck drivers. Utah also predicts sales clerks; food preparation and service workers; truck drivers; first line sales supervisors; and bookkeeping and accounting clerks among its occupations with the largest number of openings.

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[1] In Arizona, at least 3,000 job openings are predicted to occur per year (from 1990 to 1995) in each of the 10 categories listed. In New Mexico, there are predicted to be at least 370 annual openings between 1988 and 2000; and in Utah, at least 740 openings between 1990 and 1995.

EXHIBIT 8

CIT Graduates' Employment Opportunities Related To Economic Forecasts

Source	Primary Needs
Navajo Nation Overall Economic Development Program[1]	Encourage location of businesses on Navajo Nation Develop and operate facilities for tourists (e.g., small businesses, resorts, marina) Develop and operate mini-malls Construct/repair housing Improve regional water system Investigate community development projects (e.g., construction of senior centers, extension of power lines)
State of Arizona Employment Projections[2]	Retail salespersons Cashiers General office clerks General managers and top executives Waiters and waitresses Food preparation and service workers Secretaries Bookkeeping, accounting, and auditing clerks Registered nurses Janitors and cleaners
State of New Mexico Employment Projections[3]	Retail salespeople Waiters and waitresses Food counter workers Cashiers General managers and top executives Secretaries Janitors and cleaners General office clerks Registered nurses Heavy truck drivers
State of Utah Employment Projections[4]	Sales clerks Janitors and cleaners Food preparation and service workers General managers and top executives General office clerks Secretaries Truck drivers First line supervisors, sales Accounting and bookkeeping clerks Cashiers

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[1] Navajo Nation, 1990 Overall Economic Development Program. August 1990.

[2] Arizona Department of Economic Security, Research Administration. Arizona Labor Market Information: Occupational Employment Forecasts, 1990-95. Phoenix: April 1990.

[3] New Mexico Department of Labor. New Mexico Occupational Outlook 2000. Albuquerque, NM: September 1991.

[4] Matthews, John J., and Sylvester, Michael B. Utah Job Outlook, 1990-95. Salt Lake City, UT: Utah Department of Employment Security, 1990.

Of specific benefit to CIT's graduates are the predictions of job openings in bookkeeping, accounting, and auditing clerks; secretaries; janitors and cleaners; and food preparation and service workers. Graduates in the fields of accounting, secretarial science, building maintenance, and culinary arts should be able to find jobs that utilize their vocational skills.

Exhibit 9 summarizes the number of jobs predicted to be available to graduates of each of CIT's fields. More than 1,000 annual job openings are forecast in all three states combined for each of eight major fields: accounting; secretarial science; air conditioning, heating, and refrigeration; building maintenance; carpentry; electrical trades; culinary arts; and nursing assistant. Two fields (applied computer technology, and heavy equipment and diesel mechanics) are predicted to have at least 500 but less than 1,000 open jobs per year. The fields of range and livestock management, and surveying technology are predicted to have under 500 openings.

CIT staff carefully follow the occupational outlook projections of the tribe and the local states in defining the set of majors they will offer. When the projections show a continuing downturn in job opportunities (as was recently the case for plumbing and pipefitting), the major is dropped from the curriculum. Should the projections for a field show considerable growth (as has been the case for nursing assistants), college staff work to introduce a new program.

To provide a high-quality vocational program in each of its specialty areas, CIT must have sufficient space for administrative and staff offices, classrooms, and laboratories. The limitations on facilities listed earlier suggest that these functions will all be limited in the near future as the training and administration building is slated for demolition in the fall of 1992. In the following section we present options for meeting facilities needs so that the limitations need not exist permanently.

EXHIBIT 9

Average Annual Openings Predicted in CIT's Majors

CIT Major	Occupational Category	Arizona Average Annual Openings 1990-1995	New Mexico Average Annual Openings 1988-2000	Utah Average Annual Openings 1990-1995
One-year certificate programs:				
Applied computer technology	Computer programming aide	77	40	60
	Computer operator	359	60	N/A
Accounting	Bookkeeping, accounting, and auditing clerks	3,428	290	800
Secretarial science	Secretaries--not legal or medical	3,791	600	930
Livestock/range management	Livestock supervisors	N/A	10	N/A
	Livestock workers--cowboys	N/A	10	N/A
	Irrigation workers	N/A	10	N/A
	Forest and conservation workers	31	30	N/A
Heavy equipment and diesel mechanics	Bus, truck, diesel engine mechanic	333	80	70
	Mobile heavy equipment mechanic	106	50	
Air conditioning, heating, and refrigeration	Heating, A/C, refrigeration mechanics	1,600	20	60
Building maintenance	Janitors and cleaners	3,006	440	1,310
Carpentry	Carpenters	1,002	240	340
Electrical trades	Electricians	669	120	140
Surveying technology	Surveying and mapping technicians	169	10	N/A
Culinary Arts	Cooks--all types	2,912	590	780
	Food preparation workers	2,402	340	420
One-semester course:				
Nursing assistant	Nursing aides and orderlies	1,552	220	350

CIT's Facilities Needs and Alternative Solutions

In the first report, we discussed the fact that CIT could cover its equipment needs through existing sources of money, in particular, the Tribally Controlled Postsecondary Vocational Institutions Program. Its primary outstanding needs are for construction. Exhibit 10 repeats those construction needs, summarizing the 10 phases defined by the architects and engineers of Leedshill-Herkenhoff, Inc. as needed to complete all desired facilities.

Proposed below are three options for addressing CIT's outstanding facilities needs. Option one assumes no growth in enrollment in CIT's programs. The option is designed to meet the minimal needs of the institution for administrative, classroom, and laboratory space. Option two allows for increased enrollment but attempts to satisfy only basic facilities needs. The option meets CIT's needs for administrative, classroom, and laboratory space and student housing, but does not extend construction to include faculty/staff housing or recreational facilities. Finally, option three proposes to meet all facilities needs within the next five years. Exhibits 11 through 13 summarize these options.

Option One—No Increase in Enrollment and Fulfillment of Basic Facilities Needs

The primary goal of this option is to replace the training and administration building that is being torn down this fall by constructing new facilities. We follow the square footage requirements set in CIT's *Campus Master Plan*, prepared by Leedshill-Herkenhoff, under the assumption that, even though this option will not allow for an increase in enrollment, another source of funding might be found and space in the replacement facilities should allow for an eventual increase in enrollment.

As shown on Exhibit 11, three new buildings will be constructed: a trades facility containing classrooms and laboratories; a similar technology facility with classrooms and work space; and an administration building housing staff offices and student services. The total cost of this option is $10,410,000 or an average of $2,082,000 per year over the five-year period.

EXHIBIT 10

Leedshill-Herkenhoff Estimates of CIT's Facilities Construction Costs

Phase	Facility	Square Footage	Estimated Cost of Construction/ Renovation
1	Dormitory	71,400	$7,775,000
2	Family Housing	10,750	980,000
3	Trades Facility	53,625	4,305,000
4	Technology Facility • Technology • ABE/GED	45,875	3,750,000
5	Administration Facility • Administration • Library • Lecture Hall	26,493	2,355,000
6	Recreation	33,187	3,185,000
7	Support Building • Student Union • Day Care	27,645	1,585,000
8	Animal/Range Science	8,725	742,000
9	Faculty/Staff Housing	28,500	2,600,000
10	Maintenance/Warehouse	6,440	560,000
	TOTAL	312,640	$27,837,000

EXHIBIT 11

Option One: CIT Facilities Plan

Facility Need	1992-93	1993-94	1994-95	1995-96	1996-97	Total
Construction						
Trades facility	$2,152,500	$2,152,500				$4,305,000
Technology facility			$1,875,000	$1,875,000		3,750,000
Administration building					$2,355,000	2,355,000
TOTAL	**$2,152,500**	**$2,152,500**	**$1,875,000**	**$1,875,000**	**$2,355,000**	**$10,410,000**

EXHIBIT 12

Option Two: CIT Facilities Plan

Facility Need	1992-93	1993-94	1994-95	1995-96	1996-97	Total
Construction						
Trades facility	$4,305,000					$4,305,000
Technology facility		$3,750,000				3,750,000
Dormitory			$4,377,500	$3,397,500		7,735,000
Family housing				980,000		980,000
Administration building					$2,355,000	2,355,000
Renovation						
Support building					1,585,000	1,585,000
TOTAL	**$4,305,000**	**$3,750,000**	**$4,377,500**	**$4,377,500**	**$3,940,000**	**$20,750,000**

EXHIBIT 13

Option Three: CIT Facilities Plan

Facility Need	1992-93	1993-94	1994-95	1995-96	1996-97	Total
Construction						
Trades facility	$4,305,000					$4,305,000
Technology facility	1,250,000	$2,500,000				3,750,000
Dormitory		3,000,000	$4,775,000			7,775,000
Family housing			980,000			980,000
Faculty/Staff housing				$1,300,000	$1,300,000	2,600,000
Administration building				2,355,000		2,355,000
Maintenance/Warehouse				560,000		560,000
Recreation building					3,185,000	3,185,000
Animal/Range science					742,000	742,000
Renovation						
Support building				1,585,000		1,585,000
TOTAL	**$5,555,000**	**$5,500,000**	**$5,755,000**	**$5,800,000**	**$5,227,000**	**$27,837,000**

Option Two—Increase in Enrollment and Fulfillment of Basic Facilities Needs

The goal of this second option is to increase the educational facilities and the housing stock to ensure that CIT can expand its enrollment to approximately 600. Its temporary modular classrooms and laboratories will be replaced by permanent structures; its support building will be renovated so that students will have adequate library, cafeteria, and day care facilities; and its housing for students will increase to accommodate the increased enrollment.

Exhibit 12 summarizes the construction and renovation costs under option two. Construction will begin with the trades facility in 1992-93, and continue with the technology facility in 1993-94, the dormitory in 1994-96, family housing in 1995-96, and the administration building in 1996-97. The support building will be renovated in 1996-97.

The total cost of facilities improvements in this option is $20,750,000, or an average of $4,150,000 in each of the five years projected.

Option Three—Increase in Enrollment and Fulfillment of All Outstanding Needs

Option Three meets the full set of construction and renovation needs described in the *Campus Master Plan*, projecting an enrollment of 600 students by 1996-97. Exhibit 13 displays the projected costs across the five-year period. Construction of the trades and technology buildings will begin in 1992-93. Dormitory construction will begin in 1993-94 and occur over a two-year period; construction of residential space will continue with family housing in 1994-95 and faculty/staff housing in 1995-96 and 1996-97. By 1996-97, the final year of the building program, it will be possible for the institution to realize its goal of enrolling 600 students, as it will have the classrooms, laboratories, and housing space to accommodate these numbers and support services (i.e., child care, food service, and a student union) to provide for their non-academic needs. In addition, sufficient space will be able to house the faculty needed to teach all programs.

Facilities to provide optimal support for the educational process will be constructed in 1995-96 and 1996-97. In the first of these years, ground will be broken for a new administration building; a maintenance facility/warehouse will be completed. In the final year, a recreation building will provide students with athletic facilities and entertainment, and a new facility for animal and range science will allow that program to move out of the final modular building.

The total cost of this option is $27,837,000 for an average cost of $5,567,400 in each of the five years under study.

164

CHAPTER 4

CONCLUSIONS

United Tribes Technical College and Crownpoint Institute of Technology are working hard to provide the best possible education to a traditionally needy population. Tribal and state employment projections provide partial evidence of the relevance of the two institutions' vocational and technical programs. UTTC is housed in many old buildings that are in need of renovation; CIT's major training and administration building will be demolished in the fall of 1992. Both institutions have significant needs for new facilities; UTTC has additional needs for renovation of older facilities.

To meet these needs we have defined three options for each institution, ranging from the least to the costliest approach. Option one recommends meeting the most urgent current needs and not responding to the desires of the institutions to expand their student enrollment. The primary advantage of this option is its relatively lower combined cost, a total of about $2,500,000 for the institutions per year for each of the five years of our projection. The principal disadvantage is that it fails to provide vocational and technical training for as many American Indians as can be accommodated by the institutions. Both institutions feel that they have the capacity to expand their offerings and more effectively meet the needs of the communities they serve. Options two and three allow them to extend their capacity.

Option two recommends that the institutions expand their enrollment (UTTC to 400, CIT to 600) and that their basic needs for facilities be met. The combined cost of this option for both institutions is approximately $5,500,000 per year across five years. Its major advantages are that the institutions will be able to attract and train the number of students they feel is ideal, and they will have adequate facilities to hold students and carry out all educational and administrative activities. The disadvantages are more subtle. For example, CIT will have no additional faculty or staff housing. In order to attract the best people, the school will need such facilities—if not at the time of its initial expansion of enrollment (when class sizes may grow and faculty may teach one group of majors in the morning and another group in the afternoon), then later on. More importantly, perhaps, an even larger student body will have few recreational outlets. In a community where alcoholism is prevalent, such a deficiency is serious.

Option three recommends meeting all of the needs clearly expressed by these two institutions. Facilities renovation and construction will proceed apace so that each institution can expand its enrollment and optimally serve all students. This option is estimated to cost approximately $8,000,000 per year over five years, combining expenditures for the two colleges.

Finally, it is the recommendation of the study authors that option one be rejected and that either option two or option three be selected, depending on available funds. The offerings of these institutions are extensive and of high quality; their ability to increase enrollment and continue to serve the needs of their community is clear.